Fall 2015 Levee Maintenance Deficiency Summary Report Overall LMA & Unit Ratings, including USACE Erosion Survey

Sacramento River Basin

MA0013	Overall LMA	Total LMA						
Sutter Maintenance Yard Maintenance	Rating	Miles						
Area 0013	Α	41.03					Design 8	System
Rated Item			nce Deficiancy			ement	Obsole	scence
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee Vegetation					0.08			
Trim / Thin Trees	0.29		0.29	0.71%	0.00			
Encroachments	0.06		0.06	0.15%	14.35			
Animal Control	0.01		0.01	0.02%	1 1.00			
Erosion / Bank Caving	0.02		0.02	0.05%				
Crown Surface / Depressions / Rutting	1.64		1.64	4.00%				
Supplemental								
2015 USACE Erosion Survey, DRAFT	0.01		0.01	0.02%				
DWR UCIP Field Study					0.49	0.15		
LMA Totals:	2.03	0.00	2.03	4.95%	14.92	0.15	0.00	0.00
Unit No. 01 Cherokee Canal RB	Overall Unit Rating	Total Unit Miles						
MA0013	Α	18.19						
		Maintenance Deficiancy			Enforcement		Design & System Obsolescence	
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee								
Vegetation					0.07			
Trim / Thin Trees	0.02		0.02	0.11%				
Encroachments	0.01		0.01	0.06%	4.89			
Crown Surface / Depressions / Rutting	0.90		0.90	4.95%				
Supplemental	0.01		0.01	0.069/				
2015 USACE Erosion Survey, DRAFT	0.01		0.01	0.06%	0.17	0.00		
DWR UCIP Field Study Unit Totals:	0.94	0.00	0.94	E 470/	0.17 5.13	0.09	0.00	0.00
Unit Totals.	0.94	0.00	0.94	5.17%	5.13	0.09	0.00	0.00
Unit No. 02 Cherokee Canal LB	Overall Unit Rating	Total Unit Miles						
MA0013	Α	22.84						
Rated Item		Maintena	nce Deficiancy		Enforc	ement	Design 8 Obsole	
Kateu item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee					0.01			
Vegetation	0.07		0.07	4.400/	0.01			
Trim / Thin Trees	0.27		0.27	1.18%	0.40			
Encroachments	0.05		0.05	0.22%	9.46			
Animal Control	0.01		0.01	0.04% 0.09%				
Eropion / Bonk Coulon	0.00							
Erosion / Bank Caving	0.02							
Crown Surface / Depressions / Rutting	0.02		0.74	3.24%				
					0.32	0.06		

LMA District Cover Sheet

Fall 2015 Levee Inspection Results

Sutter Maintenance Yard Maintenance Area 0013

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)		
* Overall LMA Rating (Fall Only)			A			
** Non-receipt of Summer or Winter Inspection Reports may effect overall annual rational states.						
* SPRING INSPECTIONS: Overall maintenance deficiencies are rated		nined for the spring ins ria in the spring and in		ual maintenance		
	<u>FALL INSPECTIONS:</u> The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indiction of risk.					
Comments						

Unit Cover Sheet

Fall 2015 Levee Inspection Results

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles
Unit No. 01 Cherokee Canal	Right	18.19

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			Α	
Date of Inspection	05/06/2015 - 05/06/2015		11/06/2015 - 11/06/2015	
DWR Inspector	Bob Duffey		Bob Duffey	
Accompanied By	Shawn Freitag Sutter Maintenance Yard		Shawn Freitag Sutter Maintenance Yard	

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

	I	5 11 44					_
LM Start		Rating **	Α	Issue No.		1	
LM End		Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atituc	de/Longitude	
Category				Start		End	
Item		s & Maintena	nce		0		0
пеш	Manuals				0		0
DWR ID	DWR_MA0	013_01_s _ 201	13_1				
		Action/	Comme	nts			
Inspector (Comments	: The LMA ha	s the O	&M manuals	3.		

No Photos

LM Start		Rating **	Α	Issue No.		8	
LM End		Issue Type +	Ma	Location *		LS	
Earthen Levee			GPS La	atitud	le/Longitude		
Calegory	Category			Start		End	
Itom	Emergency Supplies &				0		0
item	Equipment Equipment				0		0
DWR ID	DWR ID DWR_MA0013_01_s _ 2013_8						
	Action/Comments						
Inanantar (populator Commenter The LMA has adequate fleed fight complies and						

No Photos

Inspector Comments: The LMA has adequate flood fight supplies and equipment.

LM Start		Rating **	Α	Issue No.		16	
LM End		Issue Type +	Ma	Location *		LS	
Earthen Levee				GPS L	atitud	le/Longitude	
Category				Start		End	
Item	Flood Pre	paredness &	Training		0		0
пеш				0		0	
DWR ID DWR_MA0013_01_s _ 2013_16							
		Action/	Comme	nts			

No Photos

Inspector Comments: The LMA completed flood fight training in 2014.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

0.45	Rating **	М	Issue No.		43
0.45	Issue Type +	En	Location *		LS
Earthen L	evee		GPS La	atitud	e/Longitude
			Start		End
Encroachi	ments		39.5912	37°	39.591237 °
			-121.7020	15 °	-121.702015 °
DWR_MA0	013_01_f _ 201	5_43			
	Action/	Comme	nts		
Prunings Inspector Comments: Remove the prunings from the landside slope.					
	0.45 Earthen Le	0.45 Issue Type + Earthen Levee Encroachments DWR_MA0013_01_f _ 201 Action/	0.45 Issue Type + En Earthen Levee Encroachments DWR_MA0013_01_f _ 2015_43 Action/Comme	0.45 Issue Type + En Location * Earthen Levee GPS Last Start Encroachments 39.5912 -121.7020 DWR_MA0013_01_f _ 2015_43 Action/Comments	0.45 Issue Type + En Location * Earthen Levee GPS Latitud Start Encroachments 39.591237 ° -121.702015 ° DWR_MA0013_01_f _ 2015_43 Action/Comments



View of the prunings along the landside slope.

LM Start	0.57	Rating **	С	Issue No.		19	
LM End	0.57	Issue Type +	Ма	Location *		WS	
Category	Earthen Levee				atitud	le/Longitude	
Calegory				Start		End	
Item	Slope Sta	Slope Stability			73 °	39.590173	0
пеш				-121.7006	17 °	-121.700617	0
DWR ID DWR_MA0013_01_s _ 2013_19							

Action/Comments

Repair the levee slope damaged by vehicle traffic and prevent access where possible.

Inspector Comments: Sutter Yard repaired the vehicle erosion along the waterside slope.

NIA	Photos
INO	E HOLOS

LM Start	0.63	Rating **	M	Issue No.		14			
LM End	1.17	Issue Type +	En	Location *		LS			
Category Earthen Levee				GPS Latitude/Longitude					
Category			Start			End			
Item	Encroachments			39.589272 °		39.581472	٥		
item				-121.7005	99°	-121.700518	٥		
DWR ID	DWR_MA0	013_01_s _ 20 ⁻	12_14						
		Action/	Comme	nts					
Ditch									

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	0.73	Rating **	М	Issue No.	12		
LM End	0.76	Issue Type +	En	Location *	LS		
Earthen Levee			GPS La	titud	le/Longitude		
Category						End	
Item	Encroachi	Encroachments			05 °	39.587505 °	
ILEIII				-121.7008	22 °	-121.700880 °	
DWR ID	DWR_MA0	013_01_s _ 20 ⁴	12_12				
Action/Comments							
Equipment Inspector Comments: Remove the equipment from the landside toe.							

Photo 1 of 1: FA_2015_MA0013_300_12_20150910_00006.jpg



View of the equipment along the landside toe of the levee.

LM Start	0.87	Rating **	М	Issue No.		44	
LM End	0.87	Issue Type +	En	Location *	LS		
Earthen Levee			GPS Latitude/Longitude				
Calegory	Category			Start		End	
Item	Encroach	ments		39.585857 °		39.585857	
iteiii	item			-121.7005	40 °	-121.700540	
DWR ID DWR_MA0013_01_s _ 2015_44							
Action/Comments							

Prunings

Inspector Comments: Remove the prunings from the landside slope.

Photo 1 of 1 : FA_2015_MA0013_300_44_20150910_00011.jpg	g
The same of the sa	
一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个	
05/08/2015	

View of the prunings along the landside slope.

LM Start	0.94	Rating **	М	Issue No.		20	
LM End	0.94	Issue Type +	En	Location *		LS	
LIVIENO	0.94	133dC Type T	LII	Location		LO	
Category Earthen Levee				GPS Latitude/Longitude			
Category	Category			Start		End	
Item	Encroachments			39.584885 °		° 39.584885	
пеш				-121.7004	87 °	-121.700487 °	
DWR ID	DWR_MA0	013_01_s _ 20 ²	13_20				
Action/Comments							
Prunings							



View of the prunings along the landside toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	1.66	Rating **	М	Issue No.		48	
LM End	1.66	Issue Type +	En	Location *		LS	
Supplemental				GPS Latitude/Longitude			
Calegory	Category			Start		End	
Item	DWR UCI	P Field Study		39.5758	6°	39.575816 °	
пеш				-121.70290	00°	-121.702900 °	
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46352

DS_ID:16345 EP_NO: N/A FS_HLM: 1.697

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/14/2015 4-inch pipe still present and blocking the screw gate. Crossing has 4-inch pipe inside blocking positive closure/notify landowner to remove prior to flood season. LS crossing is blocked about 50% by sediment build up. Burrow activity present on LS near crossing. 7/15/2013 Same as last inspection. 12/2/2013 Same as last inspection. PSCC 24 inch personated most irrigation pipe.

FIELD_STRUCT_DESC: 24-inch corrugated metal irrigation pipe through the levee, 7.6 feet below the crown. Slide gate in corrugated metal pipe riser on the waterward slope. Concrete headwall on the landward side. 36-inch concrete standpipe in the channel with 2 piles to deflect debris (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 1.69).

FS Date: 07/23/2015



Overview of levee at crossing looking downstream.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	1.66	Rating **	М	Issue No.		Issue No.		48 (cont)
LM End	1.66	Issue Type +	En	Location *		LS		
Supplemental			GPS Latitude/Longitude					
Category				Start		End		
Item	DWR UC	IP Field Study	39.5758	16 °	39.575816 °			
item			-121.7029	00°	-121.702900 °			
DWR ID								

Action/Comments

Inspector Comments: FS_ID:46352

DS_ID:16345 EP_NO: N/A FS_HLM: 1.697

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/14/2015 4-inch pipe still present and blocking the screw gate. Crossing has 4-inch pipe inside blocking positive closure/notify landowner to remove prior to flood season. LS crossing is blocked about 50% by sediment build up. Burrow activity present on LS near crossing. 7/15/2013 Same as last inspection. 12/2/2013 Same as last inspection. FIELD_STRUCT_DESC: 24-inch corrugated metal irrigation pipe through the levee, 7.6 feet below the crown. Slide gate in corrugated metal pipe riser on the waterward slope. Concrete headwall on the landward side. 36-inch concrete standpipe in the channel with 2 piles to

deflect debris (USACE-1960). This entry matches the Drainage or

Irrigation Structure referenced in O&M manual (HLM 1.69). FS Date: 07/23/2015



Positive closure device on WS slope, panel lid fell in.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	1.66	Rating **	М	Issue No.		48 (cont)
LM End	1.66	Issue Type +	En	Location *		LS
Category	Supplemental					le/Longitude
Calegory		Start		End		
Item	DWR UCI	DWR UCIP Field Study				39.575816 °
пеш				-121.7029	00°	-121.702900 °
DWR ID						

Action/Comments

Inspector Comments: FS_ID:46352

DS_ID:16345 EP_NO: N/A FS_HLM: 1.697

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/14/2015 4-inch pipe still present and blocking the screw gate. Crossing has 4-inch pipe inside blocking positive closure/notify landowner to remove prior to flood season. LS crossing is blocked about 50% by sediment build up. Burrow activity present on LS near crossing.7/15/2013 Same as last inspection.12/2/2013 Same as last inspection. 5/21/2014 Same as last inspection. FIELD_STRUCT_DESC: 24-inch corrugated metal irrigation pipe through the levee, 7.6 feet below the crown. Slide gate in corrugated

metal pipe riser on the waterward slope. Concrete headwall on the landward side. 36-inch concrete standpipe in the channel with 2 piles to deflect debris (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 1.69).

FS Date: 07/23/2015



WS view looking upstream.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	2.31	Rating **	М	Issue No.		49
LM End	2.31	Issue Type +	En	Location *		LS
Category	Supplemental			GPS La	ituc	le/Longitude
Calegory			Start		End	
Item	DWR UCI	P Field Study		39.56643	3°	39.566433 °
пеш			-121.70375	0°	-121.703750 °	
DWR ID						

Action/Comments

Inspector Comments: FS_ID:46351

DS_ID:16346 EP_NO: N/A FS_HLM: 2.357

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/14/2015 Still cannot find an inlet or outelt.Non functional crossing due to LS headwall buried. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0119 for no inlet or outlet visible.7/15/2013 Same as last inspection.12/2/2013 Same as last inspection.5/21/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal irrigation pipe through the levee 7.8 feet below the crown. Slide gate in corrugated metal pipe riser on the waterward slope. Pipe continues across channel. Concrete "U" headwall on the landward side. (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 2.35).

FS Date: 07/23/2015



Corrugated metal riser on WS slope. Lid panel blocking gate.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	2.31	Rating **	М	Issue No.		49 (cont)			
LM End	2.31	Issue Type +	En	Location *		LS			
Supplemental				Supplemental GPS Latit				titud	e/Longitude
Calegory	Category					End			
Item	DWR UCI	P Field Study		39.56643	33 °	39.566433			
пеш			-121.7037	50 °	-121.703750 °				
DWR ID									

Action/Comments

Inspector Comments: FS_ID:46351

DS_ID:16346 EP_NO: N/A FS_HLM: 2.357

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/14/2015 Still cannot find an inlet or outelt.Non functional crossing due to LS headwall buried. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0119 for no inlet or outlet visible.7/15/2013 Same as last inspection.12/2/2013 Same as last inspection.5/21/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal irrigation pipe through the levee 7.8 feet below the crown. Slide gate in corrugated metal pipe riser on the waterward slope. Pipe continues across channel. Concrete "U" headwall on the landward side. (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 2.35).

FS Date: 07/23/2015



Overview of crossing looking DS.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	2.31	Rating **	М	Issue No.		49 (cont)	
LM End	2.31	Issue Type +	En	Location *		LS	
Category				GPS La	tituc	le/Longitude	
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.56643	33 °	39.566433	0
пеш					50 °	-121.703750	0
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46351

DS_ID:16346 EP_NO: N/A FS_HLM: 2.357 Repair Type: Non-

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/14/2015 Still cannot find an inlet or outelt.Non functional crossing due to LS headwall buried. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0119 for no inlet or outlet visible.7/15/2013 Same as last inspection.12/2/2013 Same as last inspection.5/21/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal irrigation pipe through the levee 7.8 feet below the crown. Slide gate in corrugated metal pipe riser on the waterward slope. Pipe continues across channel. Concrete "U" headwall on the landward side. (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 2.35).

FS Date: 07/23/2015



Corrugated riser located on WS slope.

LM Start	3.05	Rating **	М	Issue No.		50
LM End	3.05	Issue Type +	En	Location *		LS
Category	ental	GPS La	tituc	le/Longitude		
Calegory	alegory					End
Item	DWR UCI	IP Field Study		39.55627	'6 °	39.556276
item				-121.70651	0 °	-121.706510 °
DWR ID						
		A - C /	<u> </u>	-1-		

Action/Comments

Inspector Comments: FS_ID:46349

DS_ID:16348 EP_NO: N/A FS_HLM: 3.07

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 7/14/2015 Unable to locate. Crossing not visible during the Spring 2012 Inspection. Attempt to find crossing during next inspection when slopes are cleared of vegetation. 7/15/2013 Same as

last inspection. Unable to locate.12/2/2013 Unable to

locate.5/21/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch drainpipe through the levee, flap gate

on waterward end. Concrete headwall on both ends.

FS Date: 07/23/2015

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	3.74	Rating **	U	Issue No.		51
LM End	3.74	Issue Type +	En	Location *		LS
Category				GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		39.5463	17 °	39.546317 °
пеш					10°	-121.707510 °
DWR ID						·

Action/Comments

Inspector Comments: FS_ID:46344

DS_ID:16365 EP_NO: N/A FS_HLM: 3.803 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 7/14/2015 LS screw gate is still damaged and buried. Crossing is non-functional.LS slide gate covered with silt. Slide gate is bent. Crossing appears not be in use. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes.7/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate is still bent and silted over.12/2/2013 Same as last inspection.5/21/2014 Same as last inspection. FIELD_STRUCT_DESC: 24-inch corrugated metal drainpipe through the levee, 7.9 feet below the crown. Flap gate on the waterward end. Screw gate on the landward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 3.82). FS Date: 07/23/2015



WS flap gate blocked by debris.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	3.74	Rating **	U	Issue No.		51 (cont)
LM End	3.74	Issue Type + En		Location *		LS
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P Field Study		39.5463 ²	17°	39.546317 °
пеш				-121.7075	10°	-121.707510 °
DWR ID						

Action/Comments

Inspector Comments: FS_ID:46344

DS_ID:16365 EP_NO: N/A FS_HLM: 3.803 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 7/14/2015 LS screw gate is still damaged and buried. Crossing is non-functional.LS slide gate covered with silt. Slide gate is bent. Crossing appears not be in use. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes.7/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate is still bent and silted over.12/2/2013 Same as last inspection.5/21/2014 Same as last inspection. FIELD_STRUCT_DESC: 24-inch corrugated metal drainpipe through the levee, 7.9 feet below the crown. Flap gate on the waterward end. Screw gate on the landward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 3.82). FS Date: 07/23/2015



LS slide gate covered with silt. Slide gate is bent.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	3.74	Rating **	U	Issue No.		51 (cont)	
LM End	3.74	Issue Type + En		Location *	Location *		
Category	GPS Latitude/Longitude						
Calegory			Start		End		
Item	DWR UCI	IP Field Study		39.5463	17°	39.546317	0
пеш				-121.7075	10°	-121.707510	0
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46344

DS_ID:16365 EP_NO: N/A FS_HLM: 3.803 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 7/14/2015 LS screw gate is still damaged and buried. Crossing is non-functional.LS slide gate covered with silt. Slide gate is bent. Crossing appears not be in use. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes.7/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate is still bent and silted over.12/2/2013 Same as last inspection.5/21/2014 Same as last inspection. FIELD_STRUCT_DESC: 24-inch corrugated metal drainpipe through the levee, 7.9 feet below the crown. Flap gate on the waterward end. Screw gate on the landward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 3.82). FS Date: 07/23/2015



Overview of levee crown at crossing looking downstream.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	3.74	Rating **	U	Issue No.		51 (cont)
LM End	3.74	Issue Type +	ue Type + En Locati			LS
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	IP Field Study		39.5463	17 °	39.546317 °
пеш				-121.7075	10°	-121.707510 °
DWR ID						

Action/Comments

DS_ID:16365 EP_NO: N/A FS_HLM: 3.803 Repair Type: Urgent Crossing Status: Found

Inspector Comments: FS_ID:46344

UCIP Comments: 7/14/2015 LS screw gate is still damaged and buried. Crossing is non-functional.LS slide gate covered with silt. Slide gate is bent. Crossing appears not be in use. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes.7/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate is still bent and silted over.12/2/2013 Same as last inspection.5/21/2014 Same as last inspection. FIELD_STRUCT_DESC: 24-inch corrugated metal drainpipe through the levee, 7.9 feet below the crown. Flap gate on the waterward end. Screw gate on the landward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 3.82). FS Date: 07/23/2015



View of LS toe.

LM Start	4.06	Rating **	М	Issue No.		18	
LM End	4.13	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS La	atituc	le/Longitude	
Calegory			Start		End		
Item	Vegetation			39.541660 °		39.540651 °	
пеш				-121.7074	08 °	-121.707404°	
DWR ID	DWR_MA0	013_01_s _ 201	13_18				
Action/Comments							
Landscapi	ng						



View of the redwood trees along the landside slope.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	4.45 Rating ** M			Issue No.		47	
LM End	5.35	Issue Type +	Ma	Location *		CR	
Category	Earthen Levee				GPS Latitude/Longitude		
Calegory						End	
Item		rface / Depres	ssions /	39.5360°	17°	39.523020 °	
item	Rutting			-121.70770)5 °	-121.707577 °	
DWR ID DWR_MA0013_01_s _ 2015_47							
Action/Comments							

Action/Comments

Repair depressions or ruts in the crown or slope. Inspector Comments: Repair the ruts in the crown roadway.



View of the ruts in the crown roadway.

LM Start	5.38	Rating **	М	Issue No.		52
LM End	5.38 Issue Type + En Location *		8 Issue Type + En			CR
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P Field Study		39.5225	66 °	39.522566 °
iteiii				-121.7075	60°	-121.707560 °
DWR ID						

Action/Comments

Inspector Comments: FS_ID:46271

DS_ID:16357 EP_NO: N/A FS_HLM: 5.466

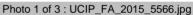
Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 WS flapgate is blocked from opening by sediment. Needs to be dug out.Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared

slopes.7/15/2013 Slopes have been cleared of vegetation and are in good condition.12/2/2013 Same as last inspection.5/21/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainpipe through the levee, 8.6 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls an both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 5.48).

FS Date: 07/17/2015





Overview of levee crown at crossing looking downstream.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	5.38	Rating **	М	Issue No.		52 (cont)
LM End	5.38	Issue Type + En		Location *		CR
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P Field Study		39.52256	66°	39.522566 °
пеш				-121.70756	° 08	-121.707560 °
DWR ID						

Action/Comments

Inspector Comments: FS_ID:46271

DS_ID:16357 EP_NO: N/A FS_HLM: 5.466

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 WS flapgate is blocked from opening by sediment. Needs to be dug out.Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared

slopes.7/15/2013 Slopes have been cleared of vegetation and are in good condition.12/2/2013 Same as last inspection.5/21/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainpipe through the levee, 8.6 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls an both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 5.48).

FS Date: 07/17/2015

LM Start	5.38	Rating **	M	Issue No.	52 (cont)
LM End	5.38	Issue Type +	Fn	Location *	CR



View of WS slope and channel.



View of WS flap gate.

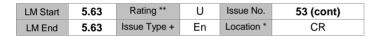
Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	5.63	Rating **	U	Issue No.		53	
LM End	5.63	Issue Type +	En	Location *		CR	
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory		S		Start		End	
Item	DWR UCI	OWR UCIP Field Study			12 °	39.519212 °	
пеш				-121.7090	30°	-121.709030 °	
DWR ID							
Action/Comments							
Inspector Comments: FS_ID:46276							

DS_ID:16359 EP_NO: N/A FS_HLM: 5.723 Repair Type: Urgent Crossing Status: Found





View of WS flap gate buried

Photo 2 of 3: UCIP_FA_2015_5628.jpg



Overview of levee crown at crossing looking downstream.

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	5.63	Rating **	U	Issue No.		53 (cont)		
LM End	5.63	Issue Type +	En	Location *		CR		
Category			GPS Latitude/Longitude					
Calegory			egory			Start		End
Item	DWR UC	IP Field Study		39.5192	12 °	39.519212 °		
item			30°	-121.709030 °				
DWR ID								
	Action/Comments							

Action/Commen

Inspector Comments: FS_ID:46276

DS_ID:16359 EP_NO: N/A FS_HLM: 5.723 Repair Type: Urgent Crossing Status: Found



View of WS slope and toe.

LM Start	5.87	Rating **	М	Issue No.		Issue No.		54				
LM End	5.87	Issue Type +	En	Location *		Location *		Location *		Location *		CR
Category	Supplemental				GPS Latitude/Longitude							
Calegory				Start		End						
Item	DWR UCI	P Field Study	P Field Study		59°	39.516059 °						
пеш				-121.7108	10°	-121.710810 °						
DWR ID												

Action/Comments

Inspector Comments: FS_ID:46277

DS_ID:16360 EP_NO: N/A FS_HLM: 5.964

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 LS screw gate was completely submerged but crossing appears to be in good condition.Burrow activity near crossing; burrow holes present on LS.7/15/2013 Same as last inspection.12/2/2013 Same as last inspection.5/21/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainpipe through the levee, 6.2 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 5.97).

FS Date: 07/17/2015



Flap gate WS

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	5.87	Rating **	М	Issue No.		54 (cont)						
LM End	5.87	Issue Type + En Location *		Issue Type + En Location *		Issue Type + En Location *		Location *		Location *		CR
Category Supplemental				GPS Latitude/Longitude								
Calegory						End						
Item	DWR UCIP Field Study		39.5160	59°	39.516059 °							
пеш				-121.7108 ⁻	10°	-121.710810 °						
DWR ID												

Action/Comments

Inspector Comments: FS_ID:46277

DS_ID:16360 EP_NO: N/A FS_HLM: 5.964 Repair Type: No

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 LS screw gate was completely submerged but crossing appears to be in good condition.Burrow activity near crossing; burrow holes present on LS.7/15/2013 Same as last inspection.12/2/2013 Same as last inspection.5/21/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainpipe through the levee, 6.2 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 5.97).

FS Date: 07/17/2015

LM Start	5.87	Rating **	М	Issue No.	54 (cont)
LM End	5.87	Issue Type +	En	Location *	CR



Photo 2 of 3: UCIP_FA_2015_4389.jpg

Overview of levee crown at crossing looking downstream.

Photo 3 of 3 : UCIP_FA_2015_4390.jpg



View of WS slope and toe.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	6.23	Rating **	U	Issue No.		55			
LM End	6.23	Issue Type +	En	Location *		CR			
Category	Suppleme	ental		GPS Latitude/Longitude					
Calegory				Start		End			
Item	DWR UCI	DWR UCIP Field Study			37 °	39.511337°			
item				-121.71362	20°	-121.713620 °			
DWR ID						·			
	Action/Comments								
Inspector Comments: FS_ID:46278 DS_ID:16361									

EP_NO: N/A FS_HLM: 6.327 Repair Type: Urgent Crossing Status: Found





View of WS flap gate.

Photo 2 of 3: UCIP_FA_2015_4392.jpg



View of WS slope and toe.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	6.23	Rating **	U	Issue No.		55 (cont)
LM End	6.23	Issue Type +	En	Location *		CR
0-4	ental		GPS La	tituc	le/Longitude	
Category				Start		End
Item	DWR UCI	P Field Study		39.51133	37 °	39.511337°
пеш			-121.71362	20°	-121.713620 °	
DWR ID						
		Action/	Comme	nts		
Inspector (DS_ID:163 EP_NO: N FS_HLM: (Repair Type Crossing S	361 /A 6.327 be: Urgent	: FS_ID:4627 Ind	8			

Photo 3 of 3: UCIP_FA_2015_5645.jpg

Overview of levee crown at crossing looking downstream.

LM Start	6.41	Rating **	М	Issue No.		3
LM End	6.99	Issue Type +	En	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Encroach	ments		39.5089	28°	39.501438 °
item				-121.7148	42 °	-121.719715 °
DWR ID	DWR_MA0	013_01_s _ 201	12_3			
		Action/	Comme	nts		
Ditch						



View of the agricultural ditch along the toe.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	6.45	Rating **	U	Issue No.		56
LM End	6.45	Issue Type +	En	Location *		LS
Category	Suppleme	ental		GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P Field Study		39.50830)9 °	39.508309°
пеш			-121.71510	00°	-121.715100 °	
DWR ID						

Action/Comments

Inspector Comments: FS_ID:46279

DS_ID:16362 EP_NO: 5200B FS_HLM: 6.554 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 Hole still present behind the LS flashboards. Hole behind flashboards against slide gate on LS slope (Health and Safety Issue). Limited inspection on WS slope due to dense vegetation. Need photo of cleared slope on WS.7/15/2013 WS slope has been cleared of vegetation and is in good condition. Hole is still present behind flash boards on LS.12/2/2013 Same as last inspection.5/21/2014 Same as last inspection.

FIELD_STRUCT_DESC: 1 of 10 items under Board Order 5200, 5200A, and 5200B: 24-inch corrugated metal drainpipe through the levee, 7.8 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete head wall on both ends (Board Order 5200B-1965). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 6.56).

FS Date: 07/17/2015



WS flap gate.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	6.45	Rating **	U	Issue No.		56 (cont)
LM End	6.45	Issue Type +	En	Location *		LS
Category	Suppleme	ental		GPS Latitude/Longitud		
Calegory				Start		End
Item	DWR UCI	P Field Study		39.50830)9 °	39.508309 °
item		-			00°	-121.715100 °
DWR ID						

Action/Comments

Inspector Comments: FS_ID:46279

DS_ID:16362 EP_NO: 5200B FS_HLM: 6.554 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 Hole still present behind the LS flashboards. Hole behind flashboards against slide gate on LS slope (Health and Safety Issue). Limited inspection on WS slope due to dense vegetation. Need photo of cleared slope on WS.7/15/2013 WS slope has been cleared of vegetation and is in good condition. Hole is still present behind flash boards on LS.12/2/2013 Same as last inspection.5/21/2014 Same as last inspection.

FIELD_STRUCT_DESC: 1 of 10 items under Board Order 5200, 5200A, and 5200B: 24-inch corrugated metal drainpipe through the levee, 7.8 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete head wall on both ends (Board Order 5200B-1965). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 6.56).

FS Date: 07/17/2015



View of WS slope and toe.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	6.45	Rating **	U	Issue No.		56 (cont)	
LM End	6.45	Issue Type +	En	Location *		LS	
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UCI	IP Field Study		39.50830)9 °	39.508309	
пеш			-121.71510	00°	-121.715100 °		
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46279

DS_ID:16362 EP_NO: 5200B FS_HLM: 6.554 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 Hole still present behind the LS flashboards. Hole behind flashboards against slide gate on LS slope (Health and Safety Issue). Limited inspection on WS slope due to dense vegetation. Need photo of cleared slope on WS.7/15/2013 WS slope has been cleared of vegetation and is in good condition. Hole is still present behind flash boards on LS.12/2/2013 Same as last inspection.5/21/2014 Same as last inspection.

FIELD_STRUCT_DESC: 1 of 10 items under Board Order 5200, 5200A, and 5200B: 24-inch corrugated metal drainpipe through the levee, 7.8 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete head wall on both ends (Board Order 5200B-1965). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 6.56).

FS Date: 07/17/2015



Overview of levee crown at crossing looking downstream.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	6.45	Rating **	М	Issue No.		57		
LM End	6.45	Issue Type +	En	Location *		LS		
Category	Supplemental				GPS Latitude/Longitude			
Calegory				Start		End		
Item	DWR UCI	IP Field Study		39.50829	98 °	39.508298°		
пеш			-121.71510	00°	-121.715100 °			
DWR ID						·		

Action/Comments

Inspector Comments: FS_ID:46280

DS_ID:16363 EP_NO: 5200B FS_HLM: 6.555

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 Same as last inspection.Clear wooden debris on upstream headwall. Upstream location latitude = 39.508298, longitude = -121.715103. Downstream location latitude = 39.50797,

longitude = -121.71534; .7/15/2013 Same as last

inspection.12/2/2013 Same as last inspection.5/21/2014 Same as

last inspection.

FIELD_STRUCT_DESC: 2 of 10 items under Board Order 5200, 5200A, and 5200B: 36-inch concrete reinforced drain pipe through levee along landward shoulder, 11.1 feet below crown. Crossing saddles landward slope, open on both ends. (Board Order 5200B-1967) FS Date: 07/17/2015

LM Start	6.45	Rating **	М	Issue No.	57 (cont)
LM End	6.45	Issue Type +	En	Location *	LS



Front view of upstream headwall on LS



View of crossing through ramp.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	6.45	Rating **	М	Issue No.		57 (cont)
LM End	6.45	Issue Type +	En	Location *		LS
Category	Suppleme	ental		GPS La	atituc	le/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		39.5082	98 °	39.508298 °
пеш				-121.7151	00°	-121.715100 °
DWR ID						
		Action/	Comme	nts		
Inspector (DS_ID:163 EP_NO: 52 FS_HLM: (Repair Type Crossing S	863 200B 8.555 be: Non-Ur		0			

	- A.)	
自義		

Photo 3 of 3: UCIP_FA_2015_5651.jpg

View of crossing looking U/S at ramp.

LM Start	6.53	Rating **	М	Issue No.		2	
LM End	6.53	Issue Type +	Ма	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Encroach	Encroachments			37 °	39.507337 °	
item	item				93 °	-121.715693 °	
DWR ID	WR ID DWR_MA0013_01_s _ 2012_2						
		Action/	Comme	nts			
Material							



View of a concrete block along the toe.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	6.99	Rating **	U	Issue No.		58	
LM End	6.99	Issue Type +	En	Location *		LS	
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory	gory			Start		End	
Item	DWR UCI	IP Field Study		39.50147	79 °	39.501479°	
пеш				-121.7197	10°	-121.719710 °	
DWR ID						·	

Action/Comments

Inspector Comments: FS_ID:46286

DS_ID:16329 EP_NO: N/A FS_HLM: 7.094 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 LS screw gate needs to be replaced. Everything else with crossing seems to be in good condition.LMA's inspection sheet of 2011 indicates settlement and visible corrosion. Damage/severe corrosion on screw gate where it bolts to headwall. No visible signs of settlement due to high vegetation cover. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared slopes for this crossing.7/15/2013 Slopes have been cleared of vegetation and are in good condition. There were no apparent signs of settling. LS screw gate is still damaged.12/2/2013 Same as last inspection.5/21/2014 Same as last inspection. FIELD_STRUCT_DESC: 24-inch corrugated metal drainpipe through the levee, 9.8 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete headwall on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 7.10). FS Date: 07/17/2015

Photo 1 of 3 : UCIP_FA_2015_5762.jpg

View of WS slope and toe.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	6.99	Rating **	U	Issue No.		58 (cont)
LM End	6.99	Issue Type +	En	Location *		LS
Category	Supplemental GPS Latitude			le/Longitude		
Calegory				Start		End
Item	DWR UCI	P Field Study		39.50147	79 °	39.501479 °
пеш				-121.7197	° O	-121.719710 °
DWR ID						

Action/Comments

Inspector Comments: FS_ID:46286

DS_ID:16329 EP_NO: N/A FS_HLM: 7.094 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 LS screw gate needs to be replaced. Everything else with crossing seems to be in good condition.LMA's inspection sheet of 2011 indicates settlement and visible corrosion. Damage/severe corrosion on screw gate where it bolts to headwall. No visible signs of settlement due to high vegetation cover. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared slopes for this crossing.7/15/2013 Slopes have been cleared of vegetation and are in good condition. There were no apparent signs of settling. LS screw gate is still damaged.12/2/2013 Same as last inspection.5/21/2014 Same as last inspection. FIELD_STRUCT_DESC: 24-inch corrugated metal drainpipe through the levee, 9.8 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete headwall on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 7.10). FS Date: 07/17/2015



Overview of levee crown at crossing looking D/S.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	6.99	Rating **	U	Issue No.		58 (cont)	
LM End	6.99	Issue Type +	En	Location *		LS	
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	P Field Study		39.5014	79 °	39.501479 °	
пеш				-121.7197	10°	-121.719710 °	
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46286

DS_ID:16329 EP_NO: N/A FS_HLM: 7.094 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 LS screw gate needs to be replaced. Everything else with crossing seems to be in good condition.LMA's inspection sheet of 2011 indicates settlement and visible corrosion. Damage/severe corrosion on screw gate where it bolts to headwall. No visible signs of settlement due to high vegetation cover. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared slopes for this crossing.7/15/2013 Slopes have been cleared of vegetation and are in good condition. There were no apparent signs of settling. LS screw gate is still damaged.12/2/2013 Same as last inspection.5/21/2014 Same as last inspection. FIELD_STRUCT_DESC: 24-inch corrugated metal drainpipe through the levee, 9.8 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete headwall on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 7.10). FS Date: 07/17/2015



WS Flap Gate

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	7.22	Rating **	U	Issue No.		Issue No.		59
LM End	7.22	Issue Type +	En	Location *	Location *			
Category	Supplemental GPS Latitude/Lo				le/Longitude			
Calegory				Start		End		
Item	DWR UC	IP Field Study		39.4988	45 °	39.498845		
item				-121.7224	40 °	-121.722440		
DWR ID								

Action/Comments

Inspector Comments: FS_ID:46287

DS_ID:16354 EP_NO: N/A FS_HLM: 7.33 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 LS screw gate stem is still bent. Gate should still be able to close fully. The rest of the crossing seems to be in good condition.LS slide gate stem is bent and needs to be replaced. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes during next inspection. Confirmed flap gate on WS. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect

ID#USACE_CESPK_M13D_2011_p_0244 for submerged WS gate.7/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate stem is still bent.12/2/2013 Same as last inspection.5/21/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainpipe through the levee, 11.2 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete "U" headwall on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 7.34).

FS Date: 07/17/2015



WS Flap Gate

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	7.22	Rating **	U	Issue No.		59 (cont)						
LM End	7.22	Issue Type + En		Location *		Location *		Location *		Location *		LS
Category	Supplemental			GPS Latitude/Longitude								
Calegory	ategory		Start		End							
Item	DWR UCI	P Field Study		39.49884	۱5°	39.498845 °						
пеш				-121.72244	° Ol	-121.722440 °						
DWR ID					·							

Action/Comments

Inspector Comments: FS_ID:46287

DS_ID:16354 EP_NO: N/A FS_HLM: 7.33 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 LS screw gate stem is still bent. Gate should still be able to close fully. The rest of the crossing seems to be in good condition.LS slide gate stem is bent and needs to be replaced. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes during next inspection. Confirmed flap gate on WS. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect

ID#USACE_CESPK_M13D_2011_p_0244 for submerged WS gate.7/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate stem is still bent.12/2/2013 Same as

last inspection.5/21/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainpipe through the levee, 11.2 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete "U" headwall on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 7.34).

FS Date: 07/17/2015



Overview of levee crown at crossing looking D/S.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	7.22	Rating **	U	Issue No.		59 (cont)		
LM End	7.22	Issue Type +	En	Location *	Location * LS			
Catagony	Supplemental			GPS Latitude/Longitude				
Calegory	Category		Start		End			
Item	DWR UCI	IP Field Study		39.4988	45 °	39.498845	0	
пеш				-121.7224	40 °	-121.722440	0	
DWR ID								

Action/Comments

Inspector Comments: FS_ID:46287

DS_ID:16354 EP_NO: N/A FS_HLM: 7.33 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 LS screw gate stem is still bent. Gate should still be able to close fully. The rest of the crossing seems to be in good condition.LS slide gate stem is bent and needs to be replaced. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes during next inspection. Confirmed flap gate on WS. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect

ID#USACE_CESPK_M13D_2011_p_0244 for submerged WS gate.7/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate stem is still bent.12/2/2013 Same as last inspection.5/21/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainpipe through the levee, 11.2 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete "U" headwall on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 7.34).

FS Date: 07/17/2015

Photo 3 of 3: UCIP_FA_2015_5767.jpg



View of WS slope and toe.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	7.46	Rating **	М	Issue No.		60		
LM End	7.46	Issue Type +	En	Location *		Location *		LS
Category	Suppleme		GPS Latitude/Longitude					
Calegory	Category			Start		End		
Item	DWR UCI	P Field Study		39.49614	6 °	39.496146 °		
item				-121.72516	° 0	-121.725160 °		
DWR ID								

Action/Comments

Inspector Comments: FS_ID:46288

DS_ID:16352 EP_NO: N/A FS_HLM: 7.571

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 WS ditch is getting to be heavily vegetated but it is not yet affecting flap gate operation. Vegetation needs to be cleared back some.Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.12/2/2013 Same as last

inspection.5/21/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainpipe through the levee, 10.2 feet below the crown. Flap gate on the waterward end. Screw gate on the landward end. Concrete headwall on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 7.58).

FS Date: 07/17/2015



View of WS flap gate. Dense vegetation on WS slope.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	7.46	Rating **	М	Issue No.		60 (cont)		
LM End	7.46	Issue Type + En Location		Location *		Location *		LS
Category	Supplemental GPS I			GPS La	titud	e/Longitude		
Calegory	Category		Start		End			
Item	DWR UCI	P Field Study		39.49614	۰ 6ا	39.496146 °		
пеш				-121.72516	° 08	-121.725160 °		
DWR ID								

Action/Comments

Inspector Comments: FS_ID:46288

DS_ID:16352 EP_NO: N/A FS_HLM: 7.571

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 WS ditch is getting to be heavily vegetated but it is not yet affecting flap gate operation. Vegetation needs to be cleared back some.Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.12/2/2013 Same as last

inspection.5/21/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainpipe through the levee, 10.2 feet below the crown. Flap gate on the waterward end. Screw gate on the landward end. Concrete headwall on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 7.58).

FS Date: 07/17/2015

Photo 2 of 3: UCIP_FA_2015_5293.jpg



WS view of slope and channel.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	7.46	Rating **	М	Issue No.		60 (cont)
LM End	7.46	Issue Type +	En	Location *		LS
Category	Supplemental					e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		39.49614	16 °	39.496146°
пеш			-121.72516	60°	-121.725160 °	
DWR ID						·

Action/Comments

Inspector Comments: FS_ID:46288

DS_ID:16352 EP_NO: N/A FS_HLM: 7.571

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 WS ditch is getting to be heavily vegetated but it is not yet affecting flap gate operation. Vegetation needs to be cleared back some.Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.12/2/2013 Same as last

inspection.5/21/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainpipe through the levee, 10.2 feet below the crown. Flap gate on the waterward end. Screw gate on the landward end. Concrete headwall on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 7.58).

FS Date: 07/17/2015



View of levee crown at crossing looking D/S.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	8.27	Rating **	М	Issue No.		61
LM End	8.27	Issue Type +	En	Location *		LS
Category	Supplemental			GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		39.48543	32 °	39.485432 °
пеш				-121.73159	90 °	-121.731590 °
DWR ID						

Action/Comments

Inspector Comments: FS_ID:46293

DS_ID:16322 EP_NO: N/A FS_HLM: 8.397

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 Minor sediment build up blocking flap gate from opening on WS. Needs to be dug out.Sediment build up on LS. Debris (broken panels) scattered near LS headwall. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared WS and LS slopes.7/15/2013 Slopes are cleared of vegetation and are in good condition. WS flapgate is blocked from opening fully by sediment.12/3/2013 Same as last inspection.5/21/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainpipe through the levee, 9.3 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends (USACE-1960). Flashboards should be present on the landward side. This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 8.40). FS Date: 07/17/2015



View of WS slope and toe.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	8.27	Rating **	М	Issue No.		61 (cont)
LM End	8.27	Issue Type +	En	Location *		LS
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UCI	IP Field Study		39.4854	32 °	39.485432 °
пеш				-121.7315	90 °	-121.731590 °
DWR ID						·

Action/Comments

Inspector Comments: FS_ID:46293

DS_ID:16322 EP_NO: N/A FS_HLM: 8.397

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 Minor sediment build up blocking flap gate from opening on WS. Needs to be dug out. Sediment build up on LS. Debris (broken panels) scattered near LS headwall. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared WS and LS slopes.7/15/2013 Slopes are cleared of vegetation and are in good condition. WS flapgate is blocked from opening fully by sediment.12/3/2013 Same as last inspection.5/21/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainpipe through the levee, 9.3 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends (USACE-1960). Flashboards should be present on the landward side. This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 8.40). FS Date: 07/17/2015





Overview of levee crown at crossing looking D/S.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	8.27	Rating **	М	Issue No.		61 (cont)	
LM End	8.27	Issue Type +	En	Location *		LS	
Category	Supplemental				titud	e/Longitude	
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.4854	32 °	39.485432	0
пеш				-121.7315	90 °	-121.731590	0
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46293

DS_ID:16322 EP_NO: N/A FS_HLM: 8.397

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 Minor sediment build up blocking flap gate from opening on WS. Needs to be dug out.Sediment build up on LS. Debris (broken panels) scattered near LS headwall. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared WS and LS slopes.7/15/2013 Slopes are cleared of vegetation and are in good condition. WS flapgate is blocked from opening fully by sediment.12/3/2013 Same as last inspection.5/21/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainpipe through the levee, 9.3 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends (USACE-1960). Flashboards should be present on the landward side. This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 8.40).

FS Date: 07/17/2015



View of WS flap gate and headwall.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	8.82	Rating **	U	Issue No.		62
LM End	8.82	Issue Type +	En	Location *		LS
Category	Suppleme	ental		GPS La	ituc	le/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		39.47857	3°	39.478573 °
item				-121.73655	0 °	-121.736550 °
DWR ID						

Action/Comments

Inspector Comments: FS_ID:46328

DS_ID:16323 EP_NO: N/A FS_HLM: 8.952 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 Erosion still present behind the LS headwall. It looks to be getting worse and is starting to affect the levee slope. Concrete headwall is cracked, erosion behind headwall is also present. LS headwall needs to be repaired/replaced. Remove wooden debris from levee shoulder. 7/15/2013 Same as last

inspection.12/3/2013 Same as last inspection.5/21/2014 Same as

last inspection.

FIELD_STRUCT_DESC: Richvale Irrigation Canal siphon crosses the channel. Five (5) by seven (7) foot concrete conduit through the levee, 18.4 feet below the crown. Distribution box and walkway are located on waterward side. Concrete headwall on the landward side. 28-foot reinforced concrete protective slab on top of the conduit in the center of the levee (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 8.95).

FS Date: 07/21/2015



Catwalk and screw gate located on WS.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	8.82	Rating **	U	Issue No.		62 (cont)
LM End	8.82	Issue Type +	En	Location *		LS
Category	Supplemental			GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		39.47857	′3 °	39.478573°
пеш				-121.73655	50°	-121.736550 °
DWR ID						·

Action/Comments

Inspector Comments: FS_ID:46328

DS_ID:16323 EP_NO: N/A FS_HLM: 8.952 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 Erosion still present behind the LS headwall. It looks to be getting worse and is starting to affect the levee slope. Concrete headwall is cracked, erosion behind headwall is also present. LS headwall needs to be repaired/replaced. Remove wooden debris from levee shoulder.7/15/2013 Same as last

inspection.12/3/2013 Same as last inspection.5/21/2014 Same as

last inspection.

FIELD_STRUCT_DESC: Richvale Irrigation Canal siphon crosses the channel. Five (5) by seven (7) foot concrete conduit through the levee, 18.4 feet below the crown. Distribution box and walkway are located on waterward side. Concrete headwall on the landward side. 28-foot reinforced concrete protective slab on top of the conduit in the center of the levee (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 8.95).

FS Date: 07/21/2015



View of LS structure. Erosion present behind headwall.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	8.82	Rating **	U	Issue No.		62 (cont)	
LM End	8.82	Issue Type +	En	Location *	Location * LS		
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.47857	′3 °	39.478573 °	
item		=		-121.73655	50 °	-121.736550 °	
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46328

DS_ID:16323 EP_NO: N/A FS_HLM: 8.952 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 Erosion still present behind the LS headwall. It looks to be getting worse and is starting to affect the levee slope. Concrete headwall is cracked, erosion behind headwall is also present. LS headwall needs to be repaired/replaced. Remove wooden debris from levee shoulder. 7/15/2013 Same as last

inspection.12/3/2013 Same as last inspection.5/21/2014 Same as

last inspection.

FIELD_STRUCT_DESC: Richvale Irrigation Canal siphon crosses the channel. Five (5) by seven (7) foot concrete conduit through the levee, 18.4 feet below the crown. Distribution box and walkway are located on waterward side. Concrete headwall on the landward side. 28-foot reinforced concrete protective slab on top of the conduit in the center of the levee (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 8.95).

FS Date: 07/21/2015



Catwalk & gate located on WS. No daylight point on WS.

LM Start	8.90	Rating **	М	Issue No.		63								
LM End	8.90	Issue Type +	En	Location *		Location *		Location *		Location *		Location *		LS
Category				GPS La	titud	le/Longitude								
Calegory				Start		End								
Item	DWR UCI	P Field Study		39.4775	30°	39.477530 °								
item			-121.7370	° 06	-121.737060 °									
DWR ID						·								

Action/Comments

Inspector Comments: FS_ID:46300

DS_ID:16328 EP_NO: 1234A FS_HLM: 9.03

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 7/13/2015 Crossing appears in good condition. No noticeable issues to report.Need to contact owner to replace marker.7/15/2013 Same as last inspection.12/3/2013 Same as last

inspection.5/21/2014 Same as last inspection.
FIELD_STRUCT_DESC: Underground telephone cable through the

levee. Depth unknown. (Permit No. 1234-1947)

FS Date: 07/17/2015



Underground telephone cable marker located on WS.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	8.95	Rating **	М	Issue No.	64		
LM End	8.95	Issue Type +	En	Location *	LS		
Category	Suppleme	upplemental			GPS Latitude/Longitud		
Calegory				Start		End	
Item	DWR UC	IP Field Study		39.47683	39°	39.476839	0
пеш				-121.73754	10°	-121.737540	0
DWR ID						`	

Action/Comments

Inspector Comments: FS_ID:46301

DS_ID:16317 EP_NO: N/A FS_HLM: 9.085

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 LS inlet has minor vegetation still. WS appears in good condition.Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspections as Corp's Inpect ID# USACE_CESPK_M13D_2011_p_0278 for WS outlet sedimentation and sediment/grass at LS inlet.7/15/2013 Slopes have been cleared of vegetation and are in good condition.12/3/2013 Same as last inspection.5/21/2014 Same as last inspection. FIELD_STRUCT_DESC: 36-inch corrugated metal drainpipe through the levee, 10.2 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends (USACE-1960). Flashboards should be present on the landward side. This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 9.09). FS Date: 07/17/2015



Overview of levee crown at crossing looking downstream.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	8.95	Rating **	М	Issue No.		64 (cont)	
LM End	8.95	Issue Type +	ssue Type + En		LS		
Category	Suppleme	ental	GPS Latitude/Longitude				
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.47683	°	39.476839	0
пеш				-121.73754	°	-121.737540	0
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46301

DS_ID:16317 EP_NO: N/A FS_HLM: 9.085

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 LS inlet has minor vegetation still. WS appears in good condition.Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspections as Corp's Inpect ID# USACE_CESPK_M13D_2011_p_0278 for WS outlet sedimentation and sediment/grass at LS inlet.7/15/2013 Slopes have been cleared of vegetation and are in good condition.12/3/2013 Same as last inspection.5/21/2014 Same as last inspection. FIELD_STRUCT_DESC: 36-inch corrugated metal drainpipe through the levee, 10.2 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends (USACE-1960). Flashboards should be present on the landward side. This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 9.09). FS Date: 07/17/2015

Photo 2 of 3 : UCIP_FA_2015_3197.jpg



View of WS slope and toe.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	8.95	Rating **	М	Issue No.		64 (cont)	
LM End	8.95	Issue Type +	En	Location * LS		LS	
Category	Supplemental				atitud	e/Longitude	
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.4768	39°	39.476839	٥
item				-121.7375	40 °	-121.737540	٥
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46301

DS_ID:16317 EP_NO: N/A FS_HLM: 9.085

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 LS inlet has minor vegetation still. WS appears in good condition.Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspections as Corp's Inpect ID# USACE_CESPK_M13D_2011_p_0278 for WS outlet sedimentation and sediment/grass at LS inlet.7/15/2013 Slopes have been cleared of vegetation and are in good condition.12/3/2013 Same as last inspection.5/21/2014 Same as last inspection. FIELD_STRUCT_DESC: 36-inch corrugated metal drainpipe through the levee, 10.2 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends (USACE-1960). Flashboards should be present on the landward side. This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 9.09). FS Date: 07/17/2015



View of LS slope and toe.

LM Start	9.70	Rating **	М	Issue No.	5		
LM End	9.72	Issue Type +	Ma	Location *		LS	
Category	Cotagon Earthen Levee			GPS La	atitud	e/Longitude	
Calegory			Start		End		
Item	Trim / Thi	n Trees		39.4671	70°	39.466860	0
item				-121.7438	87 °	-121.744108	0
DWR ID DWR_MA0013_01_s _ 2012_5							
	Action/Comments						

Trim trees to at least five feet above ground level.



Trim the trees along the landside slope and toe.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	9.74	Rating **	М	Issue No.		10
LM End	9.74	Issue Type +	En	Location * LS		LS
Category	Earthen Levee			GPS Latitude/Longitude		
Calegory	У			Start		End
Item	Encroachments			39.4666	35 °	39.466635 °
item				-121.7442	28 °	-121.744228 °
DWR ID	DWR_MA0	013_01_f _ 201	3_10			
Action/Comments						
Material Inspector Comments: Move the trailer and materials outside the 10 foot						

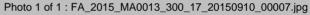
easement.

Photo 1 of 1: FA_2015_MA0013_300_10_20150910_00005.jpg



View of a trailer & material along the L/S toe.

L NA O4	44.04	Rating **	М	Issue No.		17		
LM Start	11.04	Rating	IVI	issue ivo.		17		
LM End	13.28	Issue Type +	En	Location *		Location *		WS
Category Earthen Levee			GPS Latitude/Longitude					
Category	gory				Start			
Item	Encroachments			39.4497	77 °	39.421255		
item				-121.7551	03 °	-121.774893		
DWR ID	DWR_MA0	013_01_s _ 201	12_17					
Action/Comments								
Ditch								





View of the agricultural ditch along the toe of the levee.

LM Start	11.58	М	Issue No.		4	
LM End	11.59	Issue Type +	Ma	Location *		WS
Category	Supplemental GPS Latitude/Longitu				e/Longitude	
Category		Start		End		
Item		ACE Erosion S	Survey,	39.442821	0	39.442738 °
DRAFT				-121.759851	0	-121.759908°
DWR ID						·
Action/Comments						

Inspector Comments: 2011 - Small erosion pocket likely caused by irrigation diversion structure. 2015: Site is part of the extended inventory, last inspected 2011. [2015 Site ID: CHK_11-7_R]

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	12.19	Rating **	М	Issue No.		65
LM End	12.19	Issue Type +	En	Location *		WS
Category	Suppleme	GPS Lat	itud	e/Longitude		
Calegory				Start		End
Item	DWR UCI	DWR UCIP Field Study				39.435169°
пеш				-121.76529	0 °	-121.765290 °
DWR ID						·

Action/Comments

Inspector Comments: FS_ID:46308

DS_ID:16334 EP_NO: N/A FS_HLM: 12.364 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 New screw gate installed inside the WS standpipe. Limited inspection on WS and LS slope due to dense vegetation. WS outlet of pipe not found. Need photos of cleared WS and LS slopes. Determine if WS outlet daylights after WS slope is cleared.7/15/2013 Slopes have been cleared of vegetation and are in good condition. Still no sign of WS end of pipe.12/3/2013 Same as last inspection.5/21/2014 Same as last inspection.

FIELD_STRUCT_DESC: 30-inch corrugated metal pipe through the levee, 11.0 feet below the crown. Slide gate in corrugated metal pipe riser on the waterward slope. Concrete "U" headwall on the landward side. (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 12.38).

FS Date: 07/17/2015

Photo 1 of 3 : UCIP_FA_2015_5104.jpg



View of Ws slope and channel.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	12.19	Rating **	М	Issue No.		65 (cont)
LM End	12.19	Issue Type +	En	Location *		WS
Category	Supplemental			GPS Latitude/Longitude		
Calegory	egory					End
Item	DWR UCI	IP Field Study		39.43516	89 °	39.435169°
item			-121.76529	90 °	-121.765290 °	
DWR ID						·

Action/Comments

Inspector Comments: FS_ID:46308

DS_ID:16334 EP_NO: N/A FS_HLM: 12.364 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 New screw gate installed inside the WS standpipe. Limited inspection on WS and LS slope due to dense vegetation. WS outlet of pipe not found. Need photos of cleared WS and LS slopes. Determine if WS outlet daylights after WS slope is cleared.7/15/2013 Slopes have been cleared of vegetation and are in good condition. Still no sign of WS end of pipe.12/3/2013 Same as last inspection.5/21/2014 Same as last inspection.

FIELD_STRUCT_DESC: 30-inch corrugated metal pipe through the levee, 11.0 feet below the crown. Slide gate in corrugated metal pipe riser on the waterward slope. Concrete "U" headwall on the landward side. (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 12.38).

FS Date: 07/17/2015



Slide gate located on WS slope.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	12.19	Rating **	М	Issue No.		65 (cont)
LM End	12.19	Issue Type +	En	Location *		WS
Category	Suppleme	ental		GPS La	tituc	le/Longitude
Calegory						End
Item	DWR UCI	DWR UCIP Field Study			9°	39.435169 °
пеш				-121.76529	90 °	-121.765290 °
DWR ID						

Action/Comments

Inspector Comments: FS_ID:46308

DS_ID:16334 EP_NO: N/A FS_HLM: 12.364 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 New screw gate installed inside the WS standpipe. Limited inspection on WS and LS slope due to dense vegetation. WS outlet of pipe not found. Need photos of cleared WS and LS slopes. Determine if WS outlet daylights after WS slope is cleared.7/15/2013 Slopes have been cleared of vegetation and are in good condition. Still no sign of WS end of pipe.12/3/2013 Same as last inspection.5/21/2014 Same as last inspection.

FIELD_STRUCT_DESC: 30-inch corrugated metal pipe through the levee, 11.0 feet below the crown. Slide gate in corrugated metal pipe riser on the waterward slope. Concrete "U" headwall on the landward side. (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 12.38).

FS Date: 07/17/2015



Overview of levee crown at crossing looking downstream.

LM Start	13.31	Rating **	М	Issue No.		66			
LM End	13.31	Issue Type +	En	Location *		WS			
Category	Supplemental					GPS Latitude/Longitude			
Calegory	gory					End			
Item	DWR UCI	IP Field Study		39.42092	20 °	39.420920	0		
пеш		-121.77530	00°	-121.775300	0				
DWR ID									
	Action/Comments								

Action/Comment

Inspector Comments: FS_ID:46311

DS_ID:16461 EP_NO: 17030 FS_HLM: 13.5

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 7/13/2015 Unable to locate.Attempt to locate this crossing during next inspection when tall grass is cleared from slopeslook for utility markers.7/15/2013 Same as last inspection. Unable to locate any markers.12/3/2013 Unable to locate.5/21/2014 Same as last inspection.

FIELD_STRUCT_DESC: Three 2-inch-diameter and Three 1.5-inch-diameter conduits containing fiber optic cables across and under (bored) Cherokee Canal and its levees. The permit indicates the conduits must be bored at least 5-feet below the bottom of the low flow of the channel. (Permit No. 17030-2000)

FS Date: 07/17/2015

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	13.76	Rating **	U	Issue No.		67
LM End	13.76	Issue Type +	En	Location *	WS	
Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End
Item	DWR UCI	P Field Study		39.41683	° S	39.416833 °
item				-121.78193	° 0	-121.781930 °
DWR ID						

Action/Comments

Inspector Comments: FS_ID:46313

DS_ID:16338 EP_NO: N/A FS_HLM: 13.959 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 WS flap gate is blosked from opening by sediment and vegetation. Needs to be cleared away. LS opening is being over grown by a tree and needs to be cutback. Tree has fallen at LS inlet and damaged slide gate. The tree needs to be removed and screw gate repaired. Limited inspection on LS due to fallen tree. 7/15/2013 Same as last inspection. 12/3/2013 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainpipe through the levee, 12.7 feet below the crown. Flap gate on the waterward side. Concrete "U" headwall on both ends (USACE-1960).

FS Date: 07/17/2015

LM Start	13.76	Rating **	U	Issue No.	67 (cont)
LM End	13.76	Issue Type +	Fn	Location *	WS



Tree fallen at LS headwall.



WS headwall and flap gate.

* Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

** Rating

A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable CR : Corrected U : Unacceptable U : Unacceptable U : M : Acceptable Dut Monitor & Maintain

** Rating

A : Asceptable N : Not Inspected/Rated M : Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	13.76	Rating **	U	Issue No.		67 (cont)		
LM End	13.76	Issue Type +	En	Location *	WS			
Category Supplemental			GPS Lat	ituc	le/Longitude			
Calegory				Start		End		
Item	DWR UC	P Field Study		39.41683	3°	39.416833		
item				-121.78193	0 °	-121.781930		
DWR ID								
	Action/Comments							

Inspector Comments: FS_ID:46313

DS_ID:16338 EP_NO: N/A FS_HLM: 13.959 Repair Type: Urgent Crossing Status: Found



View of channel at crossing.

							_
LM Start	13.77	Rating **	М	Issue No.	Issue No. 68		
LM End	13.77	Issue Type +	En	Location *	WS		
Supplemental			GPS Latitude/Longitude				
Category				Start		End	
Item	DWR UCI	P Field Study		39.4167	56 °	39.416756	0
item				-121.7820	60°	-121.782060	0
DWR ID							

Action/Comments

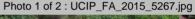
Inspector Comments: FS_ID:46314

DS ID:16339 EP_NO: N/A FS_HLM: 13.968 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 Abandoned crossing. Slide gate is buried on the WS.Non-functional crossing-buried slide gate on WS. Limited inspeciton on WS and LS slope/toe due to dense vegetation. Need photo of cleared WS & LS slopes or toe. This crossing is listed in the USACE periodic inspeciton report as Corp's Inspection ID# USACE_CESPK_M13D_2011_p_0352 for abandoned gate on WS slope.7/15/2013 Same as last inspection.12/3/2013 Same as last inspection.5/22/2014 Same as last inspection.

FIELD_STRUCT_DESC: Abandoned 12 inch steel drainpipe through the levee, 3 feet below the crown. Gate valve on the waterward slope. 1/4-inch steel plate welded on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 13.97).

FS Date: 07/17/2015





Buried slide gate on the WS slope.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	13.77	Rating **	М	Issue No.		68 (cont)		
LM End	13.77	Issue Type +	En	Location *	WS			
Category Supplemental				GPS Latitude/Longitude				
Calegory			Start		End			
Item	DWR UCI	IP Field Study		39.4167	56 °	39.416756 °		
пеш				-121.78206	60°	-121.782060 °		
DWR ID								

Action/Comments

Inspector Comments: FS_ID:46314

DS_ID:16339 EP_NO: N/A FS_HLM: 13.968 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 Abandoned crossing. Slide gate is buried on the WS.Non-functional crossing-buried slide gate on WS. Limited inspeciton on WS and LS slope/toe due to dense vegetation. Need photo of cleared WS & LS slopes or toe. This crossing is listed in the USACE periodic inspeciton report as Corp's Inspection ID# USACE_CESPK_M13D_2011_p_0352 for abandoned gate on WS slope. 7/15/2013 Same as last inspection. 12/3/2013 Same as last inspection. 5/22/2014 Same as last inspection.

FIELD_STRUCT_DESC: Abandoned 12 inch steel drainpipe through the levee, 3 feet below the crown. Gate valve on the waterward slope. 1/4-inch steel plate welded on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 13.97).

FS Date: 07/17/2015



View of LS slope and toe. Unable to find welded plate on LS.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	14.58	Rating **	М	Issue No.		69		
LM End	14.58	Issue Type +	ssue Type + En		Location *			
Category				GPS Latitude/Longitude				
Calegory	ategory			Start		End		
Item	DWR UCI	P Field Study		39.40948	31 °	39.409481 °		
item				-121.7940°	10°	-121.794010 °		
DWR ID								

Action/Comments

Inspector Comments: FS_ID:46315

DS_ID:16368 EP_NO: N/A FS_HLM: 14.792 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 Both sides of crossing were underwater at the time of inspection.Limited inspection on LS slope due to dense vegetation. Need photos of cleared WS & LS slopes. The flap gate is lodged open.7/15/2013 Slopes have been cleared of vegetation and are in good condition. WS flapgate is still lodged open.12/3/2013 Same as last inspection.5/22/2014 Same as last inspection. FIELD_STRUCT_DESC: 36-inch corrugated metal drainpipe through the levee, 12.9 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 14.79).

LM Start	14.58	Rating **	М	Issue No.	69 (cont)
LM End	14.58	Issue Type +	En	Location *	WS



Headwall and flapgate located on water side of levee



Head wall and screw gate located on land side of levee

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	14.58	Rating **	М	Issue No.		69 (cont)	
LM End	14.58	Issue Type +	En	Location *	WS		
Category			GPS Latitude/Longitude				
Calegory				Start E		End	
Itom	DWR UCI	P Field Study		39.4094	81 °	39.409481	0
item	Item			-121.7940	10°	-121.794010	0
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46315

DS_ID:16368
EP_NO: N/A
FS_HLM: 14.792
Repair Type: Non-Urgent
Crossing Status: Found



Headwall and flapgate located on water side of levee

LM Start	15.02	Rating **	С	Issue No.		45	
LM End	15.02	Issue Type +	Ма	Location *	WS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End	
Itom	Animal Co	ontrol		39.40554	12 °	39.405542	٥
пеш	Item		-121.80039	92 °	-121.800392	0	
DWR ID DWR_MA0013_01_f _ 2014_45							

Action/Comments

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comments: Sutter Yard repaired the rodent holes along the waterside slope.

No Photos

LM Start	15.72	Rating **	U	Issue No.		70		
LM End	15.72	Issue Type +	En	Location *		WS		
Category	Supplemental			GPS Latitude/Longitude				
Calegory			5			End		
Itom	DWR UCI	P Field Study		39.39905	51 °	39.399051 °		
Item	Item			-121.81055	50 °	-121.810550 °		
DWR ID								

Action/Comments

Inspector Comments: FS_ID:46317

DS_ID:16364 EP_NO: 7521 FS_HLM: 15.949 Repair Type: Urgent Crossing Status: Found



View of headwall within channel.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side	A : Acceptable M : Minimally Acceptable	N : Not Inspected/Rated C : Corrected	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	15.72	Rating **	U	Issue No.		70 (cont)	
LM End	15.72	Issue Type +	En	Location *	WS		
Category	Supplemental			GPS La	tituc	le/Longitude	
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.39905	i1°	39.399051 °	
item			·		0°	-121.810550 °	
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46317

DS_ID:16364 EP_NO: 7521 FS_HLM: 15.949 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 WS pipe end is heavily vegetated with trees and is making it almost impossible to inspect. Needs to be cleared out. LS appears in good condition.Limited inspection on WS and LS slopes/toe due to dense vegetation. Erosion behind headwall on WS toe. Need photos of cleared WS & LS slopes.7/15/2013 Slopes have been cleared of vegetation and are in good condition.12/3/2013 Same as last inspection.5/22/2014 Same as last inspection. FIELD_STRUCT_DESC: 30-inch corrugated metal drainpipe through the levee, 13.6 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends. A 48 inch corrugated metal standpipe located approximately 12 feet from landside levee toe. (Permit No. 7521-1972) FS Date: 07/17/2015



View of WS.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	15.72	Rating **	U	Issue No.		70 (cont)	
LM End	15.72	Issue Type +	En	Location *	* WS		
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Itom	DWR UCI	IP Field Study		39.39905	51 °	39.399051 °	
пеш	em			-121.81055	60°	-121.810550 °	
DWR ID						·	

Action/Comments

Inspector Comments: FS_ID:46317

DS_ID:16364 EP_NO: 7521 FS_HLM: 15.949 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 WS pipe end is heavily vegetated with trees and is making it almost impossible to inspect. Needs to be cleared out. LS appears in good condition.Limited inspection on WS and LS slopes/toe due to dense vegetation. Erosion behind headwall on WS toe. Need photos of cleared WS & LS slopes.7/15/2013 Slopes have been cleared of vegetation and are in good condition.12/3/2013 Same as last inspection.5/22/2014 Same as last inspection.
FIELD_STRUCT_DESC: 30-inch corrugated metal drainpipe through the levee, 13.6 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends. A 48 inch corrugated metal standpipe located approximately 12 feet from landside levee toe. (Permit No. 7521-1972) FS Date: 07/17/2015



Overview of levee crown at crossing looking downstream.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	15.77	Rating **	М	Issue No.		71	
LM End	15.77	Issue Type +	En	Location *	WS		
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.3986	15°	39.398615 °	
пеш				-121.81125	50°	-121.811250 °	
DWR ID						·	

Action/Comments

Inspector Comments: FS_ID:46318

DS_ID:16373 EP_NO: 11805B FS_HLM: 15.992 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 LS inlet still underwater. WS screwgate appears in good condition. Wooden wlalkway to the screwgate needs repairs.LS inlet is not visible-underwater. Limited inspection on WS and LS slope/toe due to dense vegetation. Need photos of cleared WS & LS slopes.7/15/2013 Same as last inspection.12/3/2013 Same as last inspection.

FIELD_STRUCT_DESC: 48-inch diameter reinforced concrete pipe with six concrete collars through the levee, 14.4 feet below the crown to center of conduit. Slide gate, head-wall and wood walkway on two concrete piers on waterward side of levee. Revetment on waterward slope. Irrigation ditch on the landward side. (Permit No. 11805B-1979) FS Date: 07/17/2015

 LM Start
 15.77
 Rating **
 M
 Issue No.
 71 (cont)

 LM End
 15.77
 Issue Type +
 En
 Location *
 WS



WS view of appurtances (catwalk, slide gate, and headwall)

Photo 2 of 3: UCIP_FA_2015_4713.jpg



WS view of catwalk, slide/screw gate, and headwall

* Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

** Rating

A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable CR : Corrected U : Unacceptable U : Unacceptable U : M : Acceptable Dut Monitor & Maintain

** Rating

A : Asceptable N : Not Inspected/Rated M : Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	15.77	Rating **	М	Issue No.		71 (cont)	
LM End	15.77	Issue Type +	En	Location *	WS		
Category Supplemental			GPS La	titud	le/Longitude		
				Start		End	
Item	DWR UC	P Field Study		39.3986	15 °	39.398615	
item				-121.811250		-121.811250	
DWR ID							
Action/Comments							

Inspector Comments: FS_ID:46318

DS_ID:16373 EP_NO: 11805B FS_HLM: 15.992 Repair Type: Non-Urgent Crossing Status: Found



LS view of shoulder and slope.

LM Start	16.22	Rating **	М	Issue No.		7
LM End	17.17	Issue Type +	En	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Encroachi	ments		39.3945	23 °	39.385580 °
item				-121.8176	30°	-121.831282 °
DWR ID DWR_MA0013_01_s _ 2012_7						
		Action/	Comme	nts		
Ditch						

Photo 1 of 1 : FA_2015_MA0013_300_7_20150910_00004.jpg



View of the agricultural along the toe of the levee.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	17.18	Rating **	М	Issue No.		72
LM End	17.18	Issue Type +	En	Location *		LS
Category	Suppleme	ental		GPS Latitude/Longitude		
Calegory	Category			Start		End
Item	DWR UCI	IP Field Study		39.38554	0 °	39.385540 °
item				-121.83128	0 °	-121.831280 °
DWR ID						
			_			

Action/Comments

Inspector Comments: FS_ID:46323

DS_ID:16371 EP_NO: 3511 FS_HLM: 17.42

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 7/13/2015 Unable to locate.Unable to determine if cable is still in use, per permit records indicate communication cable was installed in 1961, 1968 USACE requested to abandon line, 1974 USACE communication is not abandoned. Cable crosses multiple levees.7/15/2013 Same as last inspection. Unable to locate.12/3/2013 Unable to locate.5/22/2014 Same as last

inspection.

FIELD_STRUCT_DESC: U.S. Army communication cable through the

levee, 3.0 feet below the crown. (Permit No. 3511-1961)

FS Date: 07/20/2015

LM Start	17.22	Rating **	М	Issue No.		73
LM End	17.22	Issue Type +	En	Location *		LS
Category	ental	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UCI	IP Field Study		39.3851	72 °	39.385172 °
item				-121.8320	60°	-121.832060 °
DWR ID						

Action/Comments

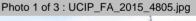
Inspector Comments: FS_ID:46326

DS_ID:16369 EP_NO: N/A FS_HLM: 17.471 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 WS flap gate is blocked from opening by sediment. Needs to be dug out.Limited inspection on WS and LS slope due to dense vegatation and steep slopes. Need photos of cleared WS & LS slopes.7/15/2013 Slopes have been sprayed and cleared of vegetation and are in good condition. WS flapgate is blocked from opening by sediment buildup.12/3/2013 Sediment was dug out from WS flapgate allowing it to open.5/22/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainpipe through the levee, 8.1 feet below the crown. Flap gate on the waterward side. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 17.47).

FS Date: 07/20/2015



No Photos



View of WS slope and toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side	A : Acceptable M : Minimally Acceptable	N : Not Inspected/Rated C : Corrected	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	17.22	Rating **	М	Issue No.		73 (cont)	
LM End	17.22	Issue Type +	En	Location *		LS	
Supplemental				GPS Latitude/Longitude			
Category				Start		End	
Item	DWR UCI	P Field Study		39.3851	72 °	39.385172 °	
пеш				-121.8320	60°	-121.832060 °	
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46326

DS_ID:16369 EP_NO: N/A FS_HLM: 17.471 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 WS flap gate is blocked from opening by sediment. Needs to be dug out.Limited inspection on WS and LS slope due to dense vegatation and steep slopes. Need photos of cleared WS & LS slopes.7/15/2013 Slopes have been sprayed and cleared of vegetation and are in good condition. WS flapgate is blocked from opening by sediment buildup.12/3/2013 Sediment was dug out from WS flapgate allowing it to open.5/22/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainpipe through the levee, 8.1 feet below the crown. Flap gate on the waterward side. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 17.47).

FS Date: 07/20/2015



View of LS headwall.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	17.22	Rating **	М	Issue No.		73 (cont)	
LM End	17.22	Issue Type +	En	Location *		LS	
Supplemental				GPS Latitude/Longitude			
Category				Start		End	
Item	DWR UCI	P Field Study		39.3851	72 °	39.385172 °	
пеш				-121.8320	60°	-121.832060 °	
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46326

DS_ID:16369 EP_NO: N/A FS_HLM: 17.471 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/13/2015 WS flap gate is blocked from opening by sediment. Needs to be dug out.Limited inspection on WS and LS slope due to dense vegatation and steep slopes. Need photos of cleared WS & LS slopes.7/15/2013 Slopes have been sprayed and cleared of vegetation and are in good condition. WS flapgate is blocked from opening by sediment buildup.12/3/2013 Sediment was dug out from WS flapgate allowing it to open.5/22/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainpipe through the levee, 8.1 feet below the crown. Flap gate on the waterward side. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 17.47).

FS Date: 07/20/2015



View of WS headwall and flap gate.

LM Start	17.46	Rating **	М	Issue No.		9
LM End	17.50	Issue Type +	En	Location *	LS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude
Calegory				Start		End
Item	Encroachments			39.3829	43 °	39.382635 °
пеш				-121.8354	47 °	-121.836012 °
DWR ID	DWR_MA0	013_01_s _ 20 ²	12_9			
		Action/	Comme	nts		
Ditch						

No Photos

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/06/2015 11/06/2015	Bob Duffey

LM Start	17.47	Rating **	М	Issue No.		15
LM End	17.94	Issue Type +	En	Location *		LS
Category Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End
Item	Encroachi	Encroachments			52 °	39.378481 °
item				-121.8356	-121.842394 °	
DWR ID DWR_MA0013_01_s _ 2012_15						
		Action/	Comme	nts		
Ditch						

No Photos

Unit Cover Sheet

Fall 2015 Levee Inspection Results

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles
Unit No. 02 Cherokee Canal	Left	22.84

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			Α	
Date of Inspection	05/12/2015 - 05/12/2015		11/06/2015 - 11/06/2015	
DWR Inspector	Bob Duffey		Bob Duffey	
Accompanied By	Shawn Freitag Sutter Maintenance Yard		Shawn Freitag Sutter Maintenance Yard	

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

	1
	14/0
	WS
Latitud	de/Longitude
	End
523°	39.572455 °
387 °	-121.702370 °
1	13523 °

No Photos

LM Start	0.58	Rating **	М	Issue No.		912	
LM End	0.58	Issue Type +	En	Location *		WS	
Supplemental GPS					titud	le/Longitude	
Calegory	Category		Start		End		
Item	DWR UCI	IP Field Study		39.56647	'9 °	39.566479	0
пеш				-121.70243	0°	-121.702430	0
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46158

DS_ID:16398 EP_NO: N/A FS_HLM: 0.58

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/1/2015 LS pipe end is still about 50% full of sediment. Need to fix the top of slide gate cover. The wooden cap on standpipe is broken. Limited evaluation of crossing due to dense vegetation on LS slope. Need photos of cleared slopes during fall inspection.7/10/2013 LS and WS slopes have been cleared of vegetation and are in good condition. LS pipe end is half full of sediment. Sediment inside of WS standpipe may hinder slide gate from fully closing. Standpipe cover is still broken.12/9/2013 Same as last inspection.5/29/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal pipe through the levee, 10.6 feet below the crown. Slide gate in corrugated metal pipe riser on the waterward slope. Concrete "U" headwall on the landward side. 36-inch concrete standpipe in the channel with two wooden piles to deflect debris. (USACE-1962) This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 0.57). FS Date: 07/07/2015

Photo 1 of 3: UCIP_FA_2015_4832.jpg



Screw gate located on WS of levee. Srew gate covers needs to be repaired.

** Rating

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable A: Acceptable C: Corrected

N: Not Inspected/Rated C: Corrected

C: Corrected

AW: Acceptable but Monitor & Maintain

** Rating

A: Asceptable A: Acceptable C: Corrected

AW: Acceptable but Monitor & Maintain

** Rating

A: Issue Type

Ma: Maintenance Deficiancy

Ob: Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	0.58	Rating **	М	Issue No.		912 (cont)		
LM End	0.58	Issue Type +	En	Location *		Location *		WS
Category	Supplemental			GPS Latitude/Longitude				
Calegory			Start		End			
Item	DWR UC	CIP Field Study		39.5664	79 °	39.566479 °		
item				-121.7024	30°	-121.702430 °		
DWR ID								

Action/Comments

Inspector Comments: FS_ID:46158

DS_ID:16398 EP_NO: N/A FS_HLM: 0.58

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/1/2015 LS pipe end is still about 50% full of sediment.Need to fix the top of slide gate cover. The wooden cap on standpipe is broken. Limited evaluation of crossing due to dense vegetation on LS slope. Need photos of cleared slopes during fall inspection.7/10/2013 LS and WS slopes have been cleared of vegetation and are in good condition. LS pipe end is half full of sediment. Sediment inside of WS standpipe may hinder slide gate from fully closing. Standpipe cover is still broken.12/9/2013 Same as last inspection.5/29/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal pipe through the levee, 10.6 feet below the crown. Slide gate in corrugated metal pipe riser on the waterward slope. Concrete "U" headwall on the landward side. 36-inch concrete standpipe in the channel with two wooden piles to deflect debris. (USACE-1962) This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 0.57).

FS Date: 07/07/2015



Overview looking south

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	0.58	Rating **	М	Issue No.		912 (cont)	
LM End	0.58	Issue Type +	En	Location *	WS		
Category	Supplemental			GPS Latitude/Longitude			
Category	Category		Start		End		
Item	DWR UCI	P Field Study		39.566479	°	39.566479	0
пеш				-121.702430	°	-121.702430	0
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46158

DS_ID:16398 EP_NO: N/A FS_HLM: 0.58

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/1/2015 LS pipe end is still about 50% full of sediment.Need to fix the top of slide gate cover. The wooden cap on standpipe is broken. Limited evaluation of crossing due to dense vegetation on LS slope. Need photos of cleared slopes during fall inspection.7/10/2013 LS and WS slopes have been cleared of vegetation and are in good condition. LS pipe end is half full of sediment. Sediment inside of WS standpipe may hinder slide gate from fully closing. Standpipe cover is still broken.12/9/2013 Same as last inspection.5/29/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal pipe through the levee, 10.6 feet below the crown. Slide gate in corrugated metal pipe riser on the waterward slope. Concrete "U" headwall on the landward side. 36-inch concrete standpipe in the channel with two wooden piles to deflect debris. (USACE-1962) This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 0.57).

FS Date: 07/07/2015

Photo 3 of 3: UCIP_FA_2015_4834.jpg



View of WS slope and toe.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	1.70	Rating **	М	Issue No.		913	
LM End	1.70	Issue Type +	En	Location *		WS	
Category	ental	GPS Latitude/Longitude					
Calegory				Start		End	
Item	DWR UCI	IP Field Study		39.55117	8°	39.551178 °	
item				-121.70566	0 °	-121.705660 °	
DWR ID					·	·	

Action/Comments

Inspector Comments: FS_ID:46160

DS_ID:16399 EP_NO: N/A FS_HLM: 1.71

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/1/2015 LS screw gate frame is still twisted and hindering the gate from opening.Limited inspection dense vegetation on WS. Need photos of clear WS slope & toe. Ditch present in channel? This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE_CESPK_M13G_2011_p_0108 for WS flap gate filled with soil and LS gate not functioning becasue of overgrown vegetation.7/10/2013 WS slope is cleared of vegetation and is in good condition. LS screw gate frame is twisted and is preventing the gate from opening.12/9/2013 Same as last inspection.5/29/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch CM drainage pipe through the levee, 7.9 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends. Slide gate at the landward toe in headwall (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 1.70). In 1962, permit number 3953 was issue for existing pump structure, intake box, ditch and power pole. In 1963, the pump and intake box were removed.

FS Date: 07/07/2015

Photo 1 of 3: UCIP_FA_2015_4951.jpg



View of WS toe.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	1.70	Rating **	М	Issue No.		913 (cont)	
LM End	1.70	Issue Type +	En	Location *		WS	
Category	ental	GPS Latitude/Longitude					
Calegory			Start		End		
Item	DWR UCI	IP Field Study		39.5511	78 °	39.551178°	
Item				-121.705660 °		° -121.705660 °	
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46160

DS_ID:16399 EP_NO: N/A FS_HLM: 1.71

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/1/2015 LS screw gate frame is still twisted and hindering the gate from opening.Limited inspection dense vegetation on WS. Need photos of clear WS slope & toe. Ditch present in channel? This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE_CESPK_M13G_2011_p_0108 for WS flap gate filled with soil and LS gate not functioning becasue of overgrown vegetation.7/10/2013 WS slope is cleared of vegetation and is in good condition. LS screw gate frame is twisted and is preventing the gate from opening.12/9/2013 Same as last inspection.5/29/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch CM drainage pipe through the levee, 7.9 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends. Slide gate at the landward toe in headwall (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 1.70). In 1962, permit number 3953 was issue for existing pump structure, intake box, ditch and power pole. In 1963, the pump and intake box were removed.

FS Date: 07/07/2015



View of flap gate on WS.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	1.70	Rating **	М	Issue No.		913 (cont)	
LM End	1.70	Issue Type +	En	Location *		WS	
Supplemental				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.55117	78 °	39.551178 °	
пеш				-121.70566	60°	-121.705660 °	
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46160

DS_ID:16399 EP_NO: N/A FS_HLM: 1.71

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/1/2015 LS screw gate frame is still twisted and hindering the gate from opening.Limited inspection dense vegetation on WS. Need photos of clear WS slope & toe. Ditch present in channel? This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE_CESPK_M13G_2011_p_0108 for WS flap gate filled with soil and LS gate not functioning becasue of overgrown vegetation.7/10/2013 WS slope is cleared of vegetation and is in good condition. LS screw gate frame is twisted and is preventing the gate from opening.12/9/2013 Same as last inspection.5/29/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch CM drainage pipe through the levee, 7.9 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends. Slide gate at the landward toe in headwall (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 1.70). In 1962, permit number 3953 was issue for existing pump structure, intake box, ditch and power pole. In 1963, the pump and intake box were removed.

FS Date: 07/07/2015



Overview of crossing

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	2.53	Rating **	М	Issue No.		914	
LM End	2.53	Issue Type +	En	Location *		WS	
Category	ental	GPS Latitude/Longitude					
Calegory				Start		End	
Item	DWR UCI	IP Field Study		39.53919	5 °	39.539195 °	
пеш				-121.70607	0 °	-121.706070 °	
DWR ID					·	·	

Action/Comments

Inspector Comments: FS_ID:46161

DS_ID:16400 EP_NO: N/A FS_HLM: 2.55

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/1/2015 New screwgate installed on the LS. WS flapgate is still blocked from opening by sediment. Handle missing on slide gate.7/10/2013 Sediment is built up against WS flap gate not allowing it to open. Handle for LS slide gate is still missing.12/9/2013 Same as last inspection.5/29/2014 Same as last inspection. FIELD_STRUCT_DESC: 1 of 2: 36-inch corrugated metal pipes through the levee, 9.7 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 2.54).

LM Start	2.53	Rating **	M	Issue No.	914 (cont)
LM End	2.53	Issue Type +	En	Location *	WS



Overview of levee crown looking south

Photo 2 of 3: UCIP_FA_2015_4955.jpg



Headwall and flap gates (2) located on water side of levee

** Rating

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable M: Not Inspected/Rated C: Corrected M: M: Minimally Acceptable U: Unacceptable U: Unacceptable M: Acceptable M: Acce

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	2.53	Rating **	М	Issue No.		914 (cont)			
LM End	2.53	Issue Type +	En	Location *		WS			
Category	GPS Latitude/Longitude								
Calegory				Start		End			
Item	DWR UCI	P Field Study		39.53919	95 °	39.539195°			
пеш				-121.70607	° 07	-121.706070 °			
DWR ID									
		Action/	Comme	nts					
Inspector (Comments	: FS_ID:4616	1						
DS_ID:164	100								
EP_NO: N	EP_NO: N/A								
FS_HLM: 2.55									
Repair Type: Non-Urgent									
Crossing S	Crossing Status: Found								

Photo 3 of 3 : UCIP_FA_2015_4956.jpg

View of WS slope.

LM Start	2.62	Rating **	М	Issue No.		915	
LM End	2.62	Issue Type +	En	Location *		WS	
Category	ental	GPS Latitude/Longitude					
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.5378	64 °	39.537864°	
пеш				-121.7061	90°	-121.706190 °	
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46163

DS_ID:16402 EP_NO: N/A FS_HLM: 2.643

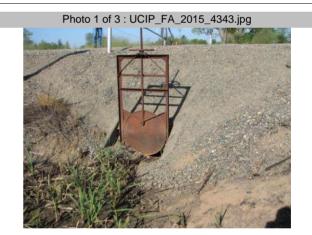
Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/1/2015 LS screwgate is still silted in and unable to be screwed down all the way. Needs to be cleaned out.Minor sediment built up on LS, remove sediment. Need photo of LS slide gate without sediment build up. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#

USACE_CESPK_M13G_2011_p_0148 for LS gate obstructed by vegetation and WS flap gate is not functionning (propped open).7/10/2013 Same as last inspection.12/9/2013 WS flapgate was closed but LS slidegate is heavily vegetated and blocked from closing by sediment.5/29/2014 Same as last inspection.
FIELD_STRUCT_DESC: 36-inch corrugated metal pipe through the levee, 8.8 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete "U" headwalls on both ends

(USACE-1960). Structure used to drain water from Nelson Shippe Road. This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 2.63).

FS Date: 07/07/2015



Headwall and screw gate located on land side of levee.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	2.62	Rating **	М	Issue No.		915 (cont)
LM End	2.62	Issue Type +	En	Location *	Location *	
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UCI	IP Field Study		39.53786	64 °	39.537864 °
пеш				-121.70619	90 °	-121.706190 °
DWR ID						

Action/Comments

Inspector Comments: FS_ID:46163

DS_ID:16402 EP_NO: N/A FS_HLM: 2.643

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/1/2015 LS screwgate is still silted in and unable to be screwed down all the way. Needs to be cleaned out.Minor sediment built up on LS, remove sediment. Need photo of LS slide gate without sediment build up. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#

USACE_CESPK_M13G_2011_p_0148 for LS gate obstructed by vegetation and WS flap gate is not functionning (propped open).7/10/2013 Same as last inspection.12/9/2013 WS flapgate was closed but LS slidegate is heavily vegetated and blocked from closing by sediment.5/29/2014 Same as last inspection.

FIELD_STRUCT_DESC: 36-inch corrugated metal pipe through the levee, 8.8 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete "U" headwalls on both ends (USACE-1960). Structure used to drain water from Nelson Shippe Road. This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 2.63).

FS Date: 07/07/2015



Headwall and flap gate located on water side of levee

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	2.62	Rating **	М	Issue No.		915 (cont)		
LM End	2.62	Issue Type +	En	Location *		WS		
Category	Suppleme	ental		GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCI	P Field Study		39.53786	64 °	39.537864 °		
пеш				-121.70619	90 °	-121.706190 °		
DWR ID								

Action/Comments

Inspector Comments: FS_ID:46163

DS_ID:16402 EP_NO: N/A FS_HLM: 2.643 Repair Type: Non

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/1/2015 LS screwgate is still silted in and unable to be screwed down all the way. Needs to be cleaned out.Minor sediment built up on LS, remove sediment. Need photo of LS slide gate without sediment build up. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#

USACE_CESPK_M13G_2011_p_0148 for LS gate obstructed by vegetation and WS flap gate is not functionning (propped open).7/10/2013 Same as last inspection.12/9/2013 WS flapgate was closed but LS slidegate is heavily vegetated and blocked from closing by sediment.5/29/2014 Same as last inspection.

FIELD_STRUCT_DESC: 36-inch corrugated metal pipe through the levee, 8.8 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete "U" headwalls on both ends (USACE-1960). Structure used to drain water from Nelson Shippe Road. This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 2.63).

FS Date: 07/07/2015



Overview looking south from left levee

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	2.63	Rating **	М	Issue No.		916
LM End	2.63	Issue Type +	En	Location *		WS
Category	Suppleme	Supplemental			titud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		39.53767	'1 °	39.537671 °
пеш				-121.70621	0 °	-121.706210 °
DWR ID						

Action/Comments

Inspector Comments: FS_ID:46204

DS_ID:16403 EP_NO: N/A FS_HLM: 2.656

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/1/2015 WS flap gate is partially blocked by sediment and needs to be cleaned.Burrowing holes located above WS headwall. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes.7/10/2013 LS and WS slopes have been cleared of vegetation and are in good condition.12/9/2013 Same as last inspection.5/29/2014 Same as last inspection.

FIELD_STRUCT_DESC: 36-inch corrugated metal pipe through the levee, 8.7 feet below the crown. Flap gate on the waterward end. Slide gate on landward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainange or Irrigation Structure referenced in O&M manual (HLM 2.65).

FS Date: 07/16/2015

Photo 1 of 3 : UCIP_FA_2015_3199.jpg



Headwall and flap gate located on WS

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	2.63	Rating **	М	Issue No.		916 (cont)
LM End	2.63	Issue Type +	En	Location *		WS
Category	Suppleme	ental		GPS La	titud	le/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		39.5376	71 °	39.537671
пеш				-121.7062	10°	-121.706210
DWR ID						

Action/Comments

Inspector Comments: FS_ID:46204

DS_ID:16403 EP_NO: N/A FS_HLM: 2.656

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/1/2015 WS flap gate is partially blocked by sediment and needs to be cleaned.Burrowing holes located above WS headwall. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes.7/10/2013 LS and WS slopes have been cleared of vegetation and are in good condition.12/9/2013 Same as last inspection.5/29/2014 Same as last inspection.

FIELD_STRUCT_DESC: 36-inch corrugated metal pipe through the levee, 8.7 feet below the crown. Flap gate on the waterward end. Slide gate on landward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainange or Irrigation Structure referenced in O&M manual (HLM 2.65).

FS Date: 07/16/2015

Photo 2 of 3 : UCIP_FA_2015_3200.jpg



Headwall and screw gate located on the LS

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	2.63	Rating **	М	Issue No.		916 (cont)
LM End	2.63	Issue Type +	En	Location *		WS
Category	Supplemental					le/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		39.53767	1°	39.537671
item				-121.70621	0 °	-121.706210 °
DWR ID						

Action/Comments

Inspector Comments: FS_ID:46204

DS_ID:16403 EP_NO: N/A FS_HLM: 2.656

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/1/2015 WS flap gate is partially blocked by sediment and needs to be cleaned.Burrowing holes located above WS headwall. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes.7/10/2013 LS and WS slopes have been cleared of vegetation and are in good condition.12/9/2013 Same as last inspection.5/29/2014 Same as last inspection.

FIELD_STRUCT_DESC: 36-inch corrugated metal pipe through the levee, 8.7 feet below the crown. Flap gate on the waterward end. Slide gate on landward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainange or Irrigation Structure referenced in O&M manual (HLM 2.65).

FS Date: 07/16/2015

Photo 3 of 3: UCIP_FA_2015_3201.jpg



Overview at levee crown looking south

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	2.65	Rating **	М	Issue No.		917
LM End	2.65	Issue Type +	En	Location *		WS
Category	Supplemental					le/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		39.5374	66°	39.537466 °
пеш			-121.7062	40 °	-121.706240 °	
DWR ID						

Action/Comments

Inspector Comments: FS_ID:46206

DS_ID:16415 EP_NO: N/A FS_HLM: 2.671 Repair Type: No

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/1/2015 WS flap gate is partially held open by sediment and needs to be dug out to allow it to fully close.7/10/2013 LS and WS slopes are in good condition. Both LS and WS gates were fully submerged in water and unable to be inspected.12/9/2013 Both gates were out of water and in good condition.5/29/2014 Same as last inspection.

FIELD_STRUCT_DESC: 36-inch corrugated metal pipe through the levee, 9.0 feet below the crown. Flap gate on the waterward end. Slide gate on the landward side. Concrete "U" headwall on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 2.66).

FS Date: 07/16/2015

LM Start	2.65	Rating **	М	Issue No.	917 (cont)
LM End	2.65	Issue Type +	En	Location *	WS



Overview looking south from left levee

Photo 2 of 3: UCIP_FA_2015_3203.jpg



Headwall and flap gate located on water side of levee

* Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

** Rating

A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable CR : Corrected U : Unacceptable U : Unacceptable U : M : Acceptable Dut Monitor & Maintain

** Rating

A : Asceptable N : Not Inspected/Rated M : Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	2.65	Rating **	М	Issue No.	917 (cont)		
LM End	2.65	Issue Type +	En	Location *	WS		
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory		Start			End		
Item	DWR UC	P Field Study	,	39.53746	66°	39.537466 °	
пеш				-121.70624	10 °	-121.706240 °	
DWR ID							
	Action/Comments						

Inspector Comments: FS_ID:46206

DS_ID:16415 EP_NO: N/A FS_HLM: 2.671

Repair Type: Non-Urgent Crossing Status: Found



WS headwall and flap gate.

LM Start	3.59	Rating **	М	Issue No.		918	
LM End	3.59	Issue Type +	En	Location *		WS	
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.5238	29°	39.523829°	
пеш				-121.7062	90°	-121.706290 °	
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46207

DS_ID:16405 EP_NO: N/A FS_HLM: 3.624

Repair Type: Non-Urgent Crossing Status: Found

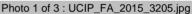
UCIP Comments: 7/1/2015 Still a non functioning crossing. LS screw gate is completely buried by sediment with only part of its frame and stem visible. WS flapgate is blocked from opening by sediment and debris.Non-functioning crossing. Farmer uses pipe located at LM 3.682 to drain field & not this one. Dense vegetation-need photos of cleared WS & LS slopes. This crossing was listed in the USACE

Periodic Inspection report as Corp's inspect ID#

USACE_CESPK_M13G_2011_p_0172 for no access to WS gate due to high water & dense vegetation.7/10/2013 LS and WS slopes have been cleared of vegetation and are in good condition. WS flap gate is out of water but is blocked from opening by sediment build up. LS gate is fully submerged and not able to be inspected.12/9/2013 LS slide gate is completely buried by soil and WS flapgate is blocked from opening by sediment. Crossing appears abandoned and nonfunctional.5/29/2014 Same as last inspection.

FIELD_STRUCT_DESC: 36-inch corrugated metal pipe through the levee, 11.5 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainange or Irrigation Structure referenced in O&M manual (HLM 3.61)

FS Date: 07/16/2015





Overview looking south from left levee

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	3.59	Rating **	М	Issue No.		918 (cont)	
LM End	3.59	Issue Type +	En	Location *	WS		
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start		End	
Itom	DWR UCI	IP Field Study		39.52382	9°	39.523829	0
Item			-121.70629	0 °	-121.706290	0	
DWR ID						·	

Action/Comments

Inspector Comments: FS_ID:46207

DS_ID:16405 EP_NO: N/A FS_HLM: 3.624

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/1/2015 Still a non functioning crossing. LS screw gate is completely buried by sediment with only part of its frame and stem visible. WS flapgate is blocked from opening by sediment and debris.Non-functioning crossing. Farmer uses pipe located at LM 3.682 to drain field & not this one. Dense vegetation-need photos of cleared WS & LS slopes. This crossing was listed in the USACE

Periodic Inspection report as Corp's inspect ID#

USACE_CESPK_M13G_2011_p_0172 for no access to WS gate due to high water & dense vegetation.7/10/2013 LS and WS slopes have been cleared of vegetation and are in good condition. WS flap gate is out of water but is blocked from opening by sediment build up. LS gate is fully submerged and not able to be inspected.12/9/2013 LS slide gate is completely buried by soil and WS flapgate is blocked from opening by sediment. Crossing appears abandoned and non-functional.5/29/2014 Same as last inspection.

FIELD_STRUCT_DESC: 36-inch corrugated metal pipe through the levee, 11.5 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainange or Irrigation

Structure referenced in O&M manual (HLM 3.61)

FS Date: 07/16/2015

Photo 2 of 3: UCIP_FA_2015_3206.jpg



Flap gate submerged in water on WS of levee

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	3.59	Rating **	М	Issue No.		918 (cont)	
LM End	3.59	Issue Type +	En	Location *	WS		
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start		End	
Itom	DWR UCI	IP Field Study		39.52382	9°	39.523829	0
Item			-121.70629	0 °	-121.706290	0	
DWR ID						·	

Action/Comments

Inspector Comments: FS_ID:46207

DS_ID:16405 EP_NO: N/A FS_HLM: 3.624 Repair Type: No

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/1/2015 Still a non functioning crossing. LS screw gate is completely buried by sediment with only part of its frame and stem visible. WS flapgate is blocked from opening by sediment and debris.Non-functioning crossing. Farmer uses pipe located at LM 3.682 to drain field & not this one. Dense vegetation-need photos of cleared WS & LS slopes. This crossing was listed in the USACE

Periodic Inspection report as Corp's inspect ID#

USACE_CESPK_M13G_2011_p_0172 for no access to WS gate due to high water & dense vegetation.7/10/2013 LS and WS slopes have been cleared of vegetation and are in good condition. WS flap gate is out of water but is blocked from opening by sediment build up. LS gate is fully submerged and not able to be inspected.12/9/2013 LS slide gate is completely buried by soil and WS flapgate is blocked from opening by sediment. Crossing appears abandoned and non-functional.5/29/2014 Same as last inspection.

FIELD_STRUCT_DESC: 36-inch corrugated metal pipe through the levee, 11.5 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainange or Irrigation Structure referenced in O&M manual (HLM 3.61)

FS Date: 07/16/2015



View of flap gate submerged on WS toe.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	3.65	Rating **	М	Issue No.		919
LM End	3.65	Issue Type +	En	Location *	WS	
Category	Suppleme	upplemental GPS La				e/Longitude
Calegory				Start		End
Item	DWR UCI	IP Field Study		39.52355	6°	39.523556 °
пеш				-121.70534	0°	-121.705340 °
DWR ID						·

Action/Comments

Inspector Comments: FS_ID:46208

DS_ID:16848 EP_NO: N/A FS_HLM: 3.684

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/1/2015 Both gates were still submerged in water. Levee slopes were in good condition. Dense vegetation makes it difficult to evaluate the condition of the LS slope. Both gates underwater. Recommend taking photos of clear slopes and gates during fall inspection. 7/10/2013 LS slope has been cleared of vegetation and is in good condition. Both gates are still underwater and not able to be inspected. 12/9/2013 Same as last inspection. 5/29/2014 Same as last inspection. FIELD_STRUCT_DESC: 36-inch corrupated metal pipe through levee,

9.2 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 3.67).

FS Date: 07/16/2015



Headwall and screw gate located on land side of levee

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	3.65	3.65 Rating ** M Is		Issue No.	Issue No. 91	
LM End	3.65	Issue Type +	En	Location *	WS	
Category	Suppleme	ental	GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UC	P Field Study		39.52355	66°	39.523556 °
пеш					10 °	-121.705340 °
DWR ID						

Action/Comments

Inspector Comments: FS_ID:46208

DS_ID:16848 EP_NO: N/A FS_HLM: 3.684

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/1/2015 Both gates were still submerged in water. Levee slopes were in good condition. Dense vegetation makes it difficult to evaluate the condition of the LS slope. Both gates underwater. Recommend taking photos of clear slopes and gates during fall inspection. 7/10/2013 LS slope has been cleared of vegetation and is in good condition. Both gates are still underwater and not able to be inspected. 12/9/2013 Same as last inspection. 5/29/2014 Same as last inspection. FIELD_STRUCT_DESC: 36-inch corrugated metal pipe through levee,

9.2 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 3.67).

FS Date: 07/16/2015



Overview looking south on left levee

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	3.65	Rating **	М	Issue No.		919 (cont)			
LM End	3.65	Issue Type +	En	Location *	Location *		ocation *		
Category	Supplemental			GPS Latitude/Longitude					
Calegory				Start		End			
Item	DWR UCI	P Field Study		39.52355	6°	39.523556	0		
пеш					0°	-121.705340	0		
DWR ID									

Action/Comments

Inspector Comments: FS_ID:46208

DS_ID:16848 EP_NO: N/A FS_HLM: 3.684

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/1/2015 Both gates were still submerged in water. Levee slopes were in good condition. Dense vegetation makes it difficult to evaluate the condition of the LS slope. Both gates underwater. Recommend taking photos of clear slopes and gates during fall inspection. 7/10/2013 LS slope has been cleared of vegetation and is in good condition. Both gates are still underwater and not able to be inspected. 12/9/2013 Same as last inspection. 5/29/2014 Same as last inspection.

FIELD_STRUCT_DESC: 36-inch corrugated metal pipe through levee, 9.2 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 3.67).

FS Date: 07/16/2015



Headwall and flap gate located on water side of levee

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	3.83	Rating **	М	Issue No.		920
LM End	3.83 Issue Type + En Location *		3.83 Issue Type + En Location *		WS	
Category	Supplemental			GPS La	atitud	e/Longitude
Calegory	gory		Start		End	
Item	DWR UC	P Field Study	P Field Study		50°	39.524350
item			·		80 °	-121.702180
DWR ID						

Action/Comments

Inspector Comments: FS_ID:46209

DS_ID:16847 EP_NO: N/A FS_HLM: 3.864 Repair Type: Non-Urgent

Crossing Status: Found

UCIP Comments: 7/1/2015 There appears to be a LS gate now but both pipe ends were submerged so it was hard to tell for certain.LS gate missing & limited inspection. Need photos of WS & LS cleared slopes. Description calls for slide gate on LS-slide gate missing. Debris scattered near LS headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID#

USACE_CESPK_M13J_2011_p_0010 for WS gate wedged open & missing LS slide gate.7/10/2013 WS and LS slopes have been cleared of vegetation and are in good condition. LS gate is still missing and WS flap gate is still wedged open with sticks.12/9/2013 Pulled sticks from WS flap gate to allow it to close. Ls gate is still missing.5/29/2014 Same as last inspection.

FIELD_STRUCT_DESC: 36-inch corrugated metal pipe through the levee, 8.8 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 3.85).

FS Date: 07/16/2015



Overview looking south on left levee

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	3.83	Rating **	М	Issue No.		920 (cont)
LM End	3.83	Issue Type +	En Location			WS
Category Supplemental GPS Lat				atitud	le/Longitude	
Calegory				Start		End
Item	DWR UCI	P Field Study		39.5243	50 °	39.524350 °
item		-		-121.7021	80 °	-121.702180 °
DWR ID						

Action/Comments

Inspector Comments: FS_ID:46209

DS_ID:16847 EP_NO: N/A FS_HLM: 3.864 Repair Type: Non

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/1/2015 There appears to be a LS gate now but both pipe ends were submerged so it was hard to tell for certain.LS gate missing & limited inspection. Need photos of WS & LS cleared slopes. Description calls for slide gate on LS-slide gate missing. Debris scattered near LS headwall. This crossing was listed in the USACE

Periodic Inspection report as Corp's Inspect ID#

USACE_CESPK_M13J_2011_p_0010 for WS gate wedged open & missing LS slide gate.7/10/2013 WS and LS slopes have been cleared of vegetation and are in good condition. LS gate is still missing and WS flap gate is still wedged open with sticks.12/9/2013 Pulled sticks from WS flap gate to allow it to close. Ls gate is still missing.5/29/2014 Same as last inspection.

FIELD_STRUCT_DESC: 36-inch corrugated metal pipe through the levee, 8.8 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 3.85).

FS Date: 07/16/2015



Headwall and flap gate located on WS toe.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	3.83	Rating **	М	Issue No.	Issue No. 920 (c		
LM End	3.83	Issue Type +	En	Location *		WS	
Category	Suppleme	oplemental			GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UCI	IP Field Study		39.5243	50 °	39.524350 °	
пеш				-121.70218	30 °	-121.702180 °	
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46209

DS_ID:16847 EP_NO: N/A FS_HLM: 3.864 Repair Type: No

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 7/1/2015 There appears to be a LS gate now but both pipe ends were submerged so it was hard to tell for certain.LS gate missing & limited inspection. Need photos of WS & LS cleared slopes. Description calls for slide gate on LS-slide gate missing. Debris scattered near LS headwall. This crossing was listed in the USACE

Periodic Inspection report as Corp's Inspect ID#

USACE_CESPK_M13J_2011_p_0010 for WS gate wedged open & missing LS slide gate.7/10/2013 WS and LS slopes have been cleared of vegetation and are in good condition. LS gate is still missing and WS flap gate is still wedged open with sticks.12/9/2013 Pulled sticks from WS flap gate to allow it to close. Ls gate is still missing.5/29/2014 Same as last inspection.

FIELD_STRUCT_DESC: 36-inch corrugated metal pipe through the levee, 8.8 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 3.85).

FS Date: 07/16/2015

Photo 3 of 3: UCIP_FA_2015_5114.jpg



View of channel at crossing looking D/S.

LM Start	3.88	Rating **	С	Issue No.		59	
LM End	4.04	Issue Type +	Ma	Location *		CR	
Category	Earthen L	evee	ree GPS Latitude/Longitude			e/Longitude	
Category			Start		End		
Item		rface / Depres	ssions /	39.5248	02 °	39.526697	0
пеш	Rutting			-121.7012	62 °	121.699680	0
DWR ID	DWR_MA0	013_02_s _ 201	15_59				
		Action/	Comme	nts			

Repair depressions or ruts in the crown or slope.

Inspector Comments: Sutter Yard repair the ruts in the crown roadway.

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	3.90	Rating **	С	Issue No.	58		
LM End	4.04	Issue Type +	Ма	Location *	LS		
Category	Earthen Levee GP				titud	le/Longitude	
Calegory				Start	End		
Item	Erosion /	Bank Caving		39.5249	73 °	39.526697	0
пеш				-121.7010	05 °	-121.699677	0
DWR ID DWR_MA0013_02_s _ 2015_58							
	Action/Comments						

Schedule repair of erosion site prior to the next inspection.
Inspector Comments: Sutter Yard repaire the landside slope erosion.

No Photos

Issue No. LM Start 4.04 Rating ** 911 4.78 Issue Type + Location * WS LM End Earthen Levee GPS Latitude/Longitude Category Start End Encroachments 39.526653° 39.534091° Item -121.699675 ° -121.690404 ° DWR ID DWR_MA0013_02_s _ 2012_911 Action/Comments Ditch

Photo 1 of 1: FA_2015_MA0013_301_911_20150910_00019.jpg



View of agricultural ditch along the toe.

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	5.01	Rating **	М	Issue No.		921		
LM End	5.01	Issue Type +	En	Location *		Location *		WS
Category	Supplemental			GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCI	P Field Study		39.52629	98 °	39.526298 °		
пеш				-121.68832	20 °	-121.688320 °		
DWR ID								

Action/Comments

Inspector Comments: FS_ID:46212

DS_ID:16395 EP_NO: N/A FS_HLM: 5.063

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 Erosion on LS does not appear to be getting any worse with tthe rip-rap there. WS pipe end and gate appeared in good condition.Rusted pipe debris located on WS. Remove pipe debris on WS and monitor the LS erosion near headwall. Rip-rap used to protect LS headwall from erosion. Was pipe exposed prior to dumping rock? Erosion on the LS could have exposed pipe. Dense shrub on the LS could restrict flow.7/9/2013 Same as last inspection.12/9/2013 Same as last inspection.

FIELD_STRUCT_DESC: 30-inch corrugated metal pipe through the levee, 8.6 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 5.06).

FS Date: 07/16/2015

Photo 1 of 3 : UCIP_FA_2015_5151.jpg



View of channel at crossing.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	5.01	Rating **	М	Issue No.		921 (cont)
LM End	5.01	Issue Type +	En	Location *		WS
Category	Suppleme	plemental GPS Latitude/Long				le/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		39.52629	8 °	39.526298 °
пеш				-121.68832	0 °	-121.688320 °
DWR ID						

Action/Comments

Inspector Comments: FS_ID:46212

DS_ID:16395 EP_NO: N/A FS_HLM: 5.063 Repair Type: Nor

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 Erosion on LS does not appear to be getting any worse with tthe rip-rap there. WS pipe end and gate appeared in good condition.Rusted pipe debris located on WS. Remove pipe debris on WS and monitor the LS erosion near headwall. Rip-rap used to protect LS headwall from erosion. Was pipe exposed prior to dumping rock? Erosion on the LS could have exposed pipe. Dense shrub on the LS could restrict flow.7/9/2013 Same as last inspection.12/9/2013 Same as last inspection.

FIELD_STRUCT_DESC: 30-inch corrugated metal pipe through the levee, 8.6 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 5.06).

FS Date: 07/16/2015



Headwall and flap gate located on water side of levee

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	5.01	Rating **	М	Issue No.		921 (cont)	
LM End	5.01	Issue Type +	En	Location *		WS	
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.5262	98 °	39.526298	٥
item				-121.6883	20°	-121.688320	٥
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46212

DS_ID:16395 EP_NO: N/A FS_HLM: 5.063

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 Erosion on LS does not appear to be getting any worse with tthe rip-rap there. WS pipe end and gate appeared in good condition.Rusted pipe debris located on WS. Remove pipe debris on WS and monitor the LS erosion near headwall. Rip-rap used to protect LS headwall from erosion. Was pipe exposed prior to dumping rock? Erosion on the LS could have exposed pipe. Dense shrub on the LS could restrict flow.7/9/2013 Same as last inspection.12/9/2013 Same as last inspection.

FIELD_STRUCT_DESC: 30-inch corrugated metal pipe through the levee, 8.6 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 5.06).

FS Date: 07/16/2015



Overview looking west on the left levee of Cottonwood

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	5.29	Rating **	М	Issue No.		922
LM End	5.29	Issue Type +	En	Location *		WS
Supplemental GPS Latitu				titud	e/Longitude	
Category				Start		End
Item	DWR UCI	IP Field Study		39.52595	8°	39.525958 °
пеш				-121.69273	80 °	-121.692730 °
DWR ID						·

Action/Comments

Inspector Comments: FS_ID:46217

DS_ID:16409 EP_NO: N/A FS_HLM: 5.34

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 WS flap gate was still overgrown with vegetation. Needs to be cleared away.Limited inspection on WS slope due to dense vegetation. Need photo of clear WS slope during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#

USACE_CESPK_M13H_2011_p_0035 non-functional crossing due to overgrown vegetation on WS flap gate.7/9/2013 Same as last

inspection.12/9/2013 Same as last inspection.5/29/2014 Same as

last inspection.

FIELD_STRUCT_DESC: 30-inch corrugated metal pipe through the levee, 5.8 feet below the crown. Flap gate on the waterward side. Slide gate on the landward side. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 5.34).

FS Date: 07/16/2015



Overview of crossing looking downstream.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	5.29	Rating **	М	Issue No.		922 (cont)	
LM End	5.29	Issue Type +	En	Location *		WS	
Category	Suppleme	mental GPS Latitude/Longitu			e/Longitude		
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.525958	3°	39.525958	0
пеш				-121.692730	°	-121.692730	0
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46217

DS_ID:16409 EP_NO: N/A FS_HLM: 5.34

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 WS flap gate was still overgrown with vegetation. Needs to be cleared away.Limited inspection on WS slope due to dense vegetation. Need photo of clear WS slope during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#

USACE_CESPK_M13H_2011_p_0035 non-functional crossing due to overgrown vegetation on WS flap gate.7/9/2013 Same as last inspection.12/9/2013 Same as last inspection.5/29/2014 Same as

last inspection.

FIELD_STRUCT_DESC: 30-inch corrugated metal pipe through the levee, 5.8 feet below the crown. Flap gate on the waterward side. Slide gate on the landward side. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 5.34).

FS Date: 07/16/2015



Headwall and flap gate located on water side of levee

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	5.29	Rating **	М	Issue No.		922 (cont)	
LM End	5.29	Issue Type +	En	Location *		WS	
Category			GPS Latitude/Longitude				
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.52595	8 °	39.525958	0
item			-121.69273	30 °	-121.692730	0	
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46217

DS_ID:16409 EP_NO: N/A FS_HLM: 5.34

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 WS flap gate was still overgrown with vegetation. Needs to be cleared away.Limited inspection on WS slope due to dense vegetation. Need photo of clear WS slope during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#

USACE_CESPK_M13H_2011_p_0035 non-functional crossing due to overgrown vegetation on WS flap gate.7/9/2013 Same as last inspection.12/9/2013 Same as last inspection.5/29/2014 Same as last inspection.

FIELD_STRUCT_DESC: 30-inch corrugated metal pipe through the levee, 5.8 feet below the crown. Flap gate on the waterward side. Slide gate on the landward side. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure

referenced in O&M manual (HLM 5.34). FS Date: 07/16/2015

Photo 3 of 3: UCIP_FA_2015_5283.jpg



View of WS headwall with dense vegetation in channel.

* Location LS : Land Side N/A: Not Applicable

WS: Water Side CR : Crown

A : Acceptable Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated Corrected A/W: Acceptable but Monitor & Maintain Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	5.36	Rating **	М	Issue No.		923	
LM End	5.36	Issue Type +	En	Location *		WS	
Category	Supplemental			GPS Latitude/Longitude			
Calegory			Start		End		
Item	DWR UCI	P Field Study		39.52536	61 °	39.525361	٥
item					30 °	-121.693630	0
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46218

DS_ID:16410 EP_NO: N/A FS_HLM: 5.404

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 Pipe still present with the cap on the waterside.Limited inspection on WS and LS slope due to dense vegetation. Need photos of clear slopes during next inspection. Metal plate bolted on pipe for closure on WS, open on LS.7/9/2013 Same as last inspection.12/9/2013 Same as last inspection.5/29/2014 Same as last inspection.

FIELD_STRUCT_DESC: 6-inch steel pipe through the levee, 1.6 feet below the crown. Plate bolted on the waterward end. Open on the landward end. (USACE-1962) This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 5.41).

FS Date: 07/16/2015

LM Start	5.36	Rating **	М	Issue No.	923 (cont)
LM End	5.36	Issue Type +	En	Location *	WS



Capped irrigation pipe located on water side of levee



Overview of site

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	5.80	Rating **	U	Issue No.		924	
LM End	5.80	Issue Type +	En	Location *		WS	
Category	Supplemental			GPS Latitude/Longitude			
Calegory					Start		
Item	DWR UCI	P Field Study		39.52338	31 °	39.523381	0
item					70 °	-121.701270	0
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46219

DS_ID:16411 EP_NO: N/A FS_HLM: 5.853 Repair Type: Urgent Crossing Status: Found



Overview looking south

Photo 2 of 3: UCIP_FA_2015_5287.jpg



LM Start 5.80 Rating ** Issue No. 924 (cont) Issue Type + En Location * WS LM End 5.80

Headwall and damaged/missing screw gate on land side of levee

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

		D // ++					
LM Start	5.80	Rating **	U	Issue No.		924 (cont)	
LM End	5.80	Issue Type +	En	Location *		WS	
Category			GPS Latitude/Longitude				
Calegory	Sategory			Start		End	
Item	DWR UCI	DWR UCIP Field Study			81 °	39.523381 °	
пеш				-121.70127	'0 °	-121.701270 °	
DWR ID							
Action/Comments							
Inspector Comments: FS_ID:46219							

DS_ID:16411 EP_NO: N/A FS_HLM: 5.853 Repair Type: Urgent Crossing Status: Found



Headwall and flap gate on water side of levee

LM Start	5.80	Rating **	М	Issue No.		925			
LM End	5.80	Issue Type +	En	Location *		WS			
Category	Supplemental				GPS Latitude/Longitude				
Calegory	Category			Start		End			
Item	DWR UCI	P Field Study		39.5233	70°	39.523370 °			
пеш				-121.7013	30°	-121.701330 °			
DWR ID						·			

Action/Comments

Inspector Comments: FS_ID:46220

DS_ID:16466 EP_NO: 13170 FS_HLM: 5.856

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 High water on both side of crossing still. Slopes appear in good condition. Both pipe ends and gates were submerged.Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13H_2011_p_0058 for high water unable to see crossing.7/9/2013 Same as last inspection.12/9/2013 Same as last inspection.

FIELD_STRUCT_DESC: 36 inch corrugated metal pipe through the levee approximately 7 feet below crown. Flap gate is located on the waterward side. (13170-1981)

FS Date: 07/16/2015



Overview photo of crossing looking downstream.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	5.80	Rating **	М	Issue No.		925 (cont)	
LM End	5.80	Issue Type +	En	Location *		WS	
Category	Suppleme	ental		GPS La	titud	e/Longitude	
Calegory	egory			Start		End	
Item	DWR UCI	IP Field Study		39.52337	70 °	39.523370°	
пеш				-121.70133	30 °	-121.701330 °	
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46220

DS_ID:16466 EP_NO: 13170 FS_HLM: 5.856

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 High water on both side of crossing still. Slopes appear in good condition. Both pipe ends and gates were submerged.Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13H_2011_p_0058 for high water unable to see crossing.7/9/2013 Same as last inspection.12/9/2013 Same as last inspection.

FIELD_STRUCT_DESC: 36 inch corrugated metal pipe through the levee approximately 7 feet below crown. Flap gate is located on the waterward side. (13170-1981)

FS Date: 07/16/2015



Flap gate on WS unable to determine slope condition on WS due to overgrown vegetation.

LM Start	5.80	Rating **	М	Issue No.	925 (cont)
LM End	5.80	Issue Type +	En	Location *	WS





Headwall and screw gate on land side of levee

*Location
LS: Land Side N/A: Not Applicable
WS: Water Side CR: Crown

** Rating
A: Acceptable
N: Not Inspected/Rated
C: Corrected
N: Not Inspected/Rated
C: Corrected
C: Corrected
AW: Acceptable but Monitor & Maintain

** Rating
A: Asceptable
N: Not Inspected/Rated
C: Corrected
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	6.07	Rating **	М	Issue No.		926		
LM End	6.07	Issue Type +	En	Location *	tion * WS			
Category	Suppleme	ental		GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCI	P Field Study		39.5224	57°	39.522457 °		
пеш				-121.7060	30°	-121.706030 °		
DWR ID								

Action/Comments

Inspector Comments: FS_ID:46223

DS_ID:17374 EP_NO: N/A FS_HLM: 6.125

Repair Type: Non-Urgent Crossing Status: Found





3 of 3 Eight (8) foot by Ten (10) foot siphon. (downstream conduit)



Overview looking south from levee

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	6.07	Rating **	М	Issue No.		926 (cont)			
LM End	6.07	Issue Type +	En	Location *		En Location *		WS	
Category	GPS La	titud	le/Longitude						
Calegory			Start		End				
Item	DWR UCI	P Field Study		39.5224	57 °	39.522457	0		
item				-121.70603	30 °	-121.706030	0		
DWR ID									

Action/Comments

Inspector Comments: FS_ID:46223

DS_ID:17374 EP_NO: N/A FS_HLM: 6.125

Repair Type: Non-Urgent Crossing Status: Found



View of Western Canal Siphon (Richvale Siphon) looking south.

LM Start	6.12	Rating **	М	Issue No.		55	
LM End	6.12	Issue Type +	Ма	Location *	LS		
Category	evee	GPS La	titud	e/Longitude			
Calegory				Start		End	
Item	Encroachi	ments		39.5216	34 °	39.521634	٥
iteiii				-121.7061	84 °	-121.706184	0
DWR ID DWR_MA0013_02_s _ 2014_55							

Action/Comments

Tree or limb

Inspector Comments: Remove the tree limbs from the landside slope.



View of the tree limbs on the landside slope and toe.

LM Start	6.18	Rating **	М	Issue No.		12		
LM End	7.54	Issue Type +	En	Location *		LS		
Category	Earthen L	evee	GPS Latitude/Longitude					
Calegory				Start		End		
Item	Encroach		39.520843 °		39.502958°			
iteiii				-121.7063	45 °	-121.716953 °		
DWR ID	DWR_MA0	013_02_s _ 201	12_12					
	Action/Comments							
Ditch								



View of the agricultural ditch along the toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	7.18	Rating **	М	Issue No.		927	
LM End	7.18	Issue Type +	En	Location *	LS		
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	IP Field Study		39.5075	70 °	39.507570°	
пеш				-121.7138	70 °	-121.713870 °	
DWR ID						·	

Action/Comments

Inspector Comments: FS_ID:46227

DS_ID:17518 EP_NO: 5200B FS_HLM: 7.253

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 6/30/2015 Unable to locate.Not found - Need to verify if there are any signs of the structure during next inspection when slopes are cleared. If not will need to coordinate with applicant regarding the fate of this structure.7/9/2013 Same as last inspection. Unable to locate.12/9/2013 Unable to locate.5/29/2014 Same as last inspection.

FIELD_STRUCT_DESC: 10 of 10 items listed under Board Order 5200, 5200A, 5200B: 36 inch corrugated metal spill pipe through the levee embankment, unknown depth. (Board Order No. 5200B-1967)

FS Date: 07/16/2015

Photo 1 of 1 : FA	_2015_	_MA0013_	_301_	_60_	_20150910_	_00017	.jpg

No Photos



View of the ruts in the crown roadway.

LM Start	7.46	Rating **	М	Issue No.		60		
LM End	8.20	Issue Type +	Ma	Location *	CR			
Category	Earthen L	evee	GPS Latitude/Longitude					
Category				Start		End		
Item		rface / Depres	ssions /	39.50394	ı3°	39.495120 °		
пеш	Rutting			-121.7163	0 °	-121.724060 °		
DWR ID	DWR_MA0013_02_s _ 2015_60							
	Action/Comments							

Add appropriate material and re-grade the levee to bring the crown above the design elevation.

Inspector Comments: Repair the ruts in the crown roadway.

* Location

LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

A : Not Applicable

A : Acceptable

M : Minimally Acceptable

U : Unacceptable

N : Not Inspected/Rated C : Corrected

A/W: Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	8.30	Rating **	М	Issue No.	e No. 928		sue No. 928	
LM End	8.30	Issue Type +	En	Location *		CR		
Category	Suppleme	ental		GPS La	titud	le/Longitude		
Calegory				Start		End		
Item	DWR UCI	P Field Study		39.4938	50°	39.493850 °		
item				-121.7247	80 °	-121.724780 °		
DWR ID								

Action/Comments

Inspector Comments: FS_ID:46228

DS_ID:16413 EP_NO: 14704 FS_HLM: 8.384

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 6/30/2015 Crossing is in good condition. Unusre on the permit issues below.11/4/14 (DWR-Olivia Magana) Need to contact owner to determine whether both communication are still active and same alignment? permit 14704 (LM 8.38) and 10589 (see LM 8.39) Priority changed in Part IX from No Action Needed to Non-Urgent.5/29/2014 Same as last inspection.12/4/2013 Same as last inspection.7/9/2013 Same as last inspection. Unable to verify whether this crossing includes both communication cable lines under permit 14704 (LM 8.38) and 10589 (see LM 8.39). FIELD_STRUCT_DESC: Fiber optic cable through levee at

approximately 3.5 feet. The cable section across the channel is attached to the Cherokee Canal Dridge. (Permit No. 14704-1987)

FS Date: 07/16/2015



Buried cable box located on the LS edge.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	8.30	Rating **	М	Issue No.		928 (cont)		
LM End	8.30	Issue Type +	En	Location *		Location *		CR
Category Supplemental 0				GPS La	atitud	le/Longitude		
Calegory				Start		End		
Item	DWR UCI	P Field Study		39.493850 °		39.493850 °		
item				-121.7247	80°	-121.724780 °		
DWR ID						·		

Action/Comments

Inspector Comments: FS_ID:46228

DS_ID:16413 EP_NO: 14704 FS_HLM: 8.384

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 6/30/2015 Crossing is in good condition. Unusre on the permit issues below.11/4/14 (DWR-Olivia Magana) Need to contact owner to determine whether both communication are still active and same alignment? permit 14704 (LM 8.38) and 10589 (see LM 8.39) Priority changed in Part IX from No Action Needed to Non-Urgent.5/29/2014 Same as last inspection.12/4/2013 Same as last inspection.7/9/2013 Same as last inspection. Unable to verify whether this crossing includes both communication cable lines under permit 14704 (LM 8.38) and 10589 (see LM 8.39). FIELD_STRUCT_DESC: Fiber optic cable through levee at

approximately 3.5 feet. The cable section across the channel is attached to the Cherokee Canal Dridge. (Permit No. 14704-1987) FS Date: 07/16/2015



WS view cable line attached to highway bridge.

N: Not Inspected/Rated : Corrected A/W: Acceptable but Monitor & Maintain Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	8.30	Rating **	М	Issue No.		929
LM End	8.30	Issue Type +	En	Location *		CR
Category	Suppleme	ental		GPS Latitude/Longitude		
Calegory				Start End		End
Item	DWR UCI	IP Field Study		39.4937	80 °	39.493780°
item				-121.7248	40 °	-121.724840 °
DWR ID						·

Action/Comments

Inspector Comments: FS_ID:46229

DS_ID:16404 EP_NO: 10589A FS_HLM: 8.39

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 6/30/2015 Crossing appears in good condition. Unsure on the permit issues listed below.11/4/14 (DWR-Olivia Magana) Need to contact owner to determine whether both communication are still active and same alignment? permit 14704 (LM 8.38) and 10589 (see LM 8.39) Priority changed in Part IX from No Action Needed to Non-Urgent.5/29/2014 Same as last inspection.12/4/2013 Same as last inspection.7/9/2013 Same as last inspection.Unable to verify whether this crossing includes both communication cable lines under permit 14704 (LM 8.38) and 10589 (see LM 8.39).

FIELD_STRUCT_DESC: 4 inch steel pipe, contains three telephone cables, through the levee at approximately 4 feet below the crown. The cable through the channel is buried approximately 5 feet deep. (Permit No. 10589-1987)

No. 10589-1987) FS Date: 07/16/2015



Waterside view of utility line alignment through levee then attached to bridge.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	8.30	Rating **	М	Issue No.		929 (cont)				
LM End	8.30	Issue Type +	En	Location *		Location *		n Location *		CR
Category	Suppleme	Supplemental			titud	le/Longitude				
Calegory				Start		End				
Item	DWR UCI	P Field Study		39.4937	80°	39.493780°				
item				-121.7248	40 °	-121.724840 °				
DWR ID										

Action/Comments

Inspector Comments: FS_ID:46229

DS_ID:16404 EP_NO: 10589A FS_HLM: 8.39

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 6/30/2015 Crossing appears in good condition. Unsure on the permit issues listed below.11/4/14 (DWR-Olivia Magana) Need to contact owner to determine whether both communication are still active and same alignment? permit 14704 (LM 8.38) and 10589 (see LM 8.39) Priority changed in Part IX from No Action Needed to Non-Urgent.5/29/2014 Same as last inspection.12/4/2013 Same as last inspection.7/9/2013 Same as last inspection.Unable to verify whether this crossing includes both communication cable lines under permit 14704 (LM 8.38) and 10589 (see LM 8.39).

FIELD_STRUCT_DESC: 4 inch steel pipe, contains three telephone cables, through the levee at approximately 4 feet below the crown. The cable through the channel is buried approximately 5 feet deep. (Permit No. 10589-1987)

No. 10589-1987) FS Date: 07/16/2015



Buried cable box located on the landside edge.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	9.56	Rating **	М	Issue No.		930		
LM End	9.56	Issue Type +	En	Location *		En Location *		CR
Category	Suppleme	ental		GPS Latitude/Longitude				
Calegory						End		
Item	DWR UCI	P Field Study		39.4774	38°	39.477438 °		
пеш				-121.735200 °		-121.735200 °		
DWR ID								

Action/Comments

Inspector Comments: FS_ID:46233

DS_ID:16838 EP_NO: N/A FS_HLM: 9.664

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 Path to access the WS flap gate was getting overgrown with vegetation but other than that everything with the crosing looked in good condition. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13F_2011_p_0080 for limited visibility of LS slide gate and WS flap gate. 7/9/2013 Same as last inspection. 12/4/2013 Same as last inspection. 5/28/2014 Same as last inspection. FIELD_STRUCT_DESC: Crossing is part of the Richvale Irrigation District siphon structure. 36 inch CM pipe that drains into Cherokee Canal at about 11.2 feet below the crown. (USACE-1962) Slide gate is located on landward side. Flap gate is located on waterward side. Crossing angles to the southwest to a flap gate & headwall located about 60 feet from waterward toe. This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 9.66). FS Date: 07/16/2015



Overview of levee crown at crossing looking D/S.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	9.56	Rating **	М	Issue No.	ssue No. 930 (cor			
LM End	9.56	Issue Type +	En Location *			CR		
Category	Suppleme	Supplemental			GPS Latitude/Longitude			
Calegory				Start End		End		
Item	DWR UC	P Field Study		39.4774	38 °	39.477438	0	
item				-121.735200		-121.735200	0	
DWR ID								

Action/Comments

Inspector Comments: FS_ID:46233

DS_ID:16838 EP_NO: N/A FS_HLM: 9.664

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 Path to access the WS flap gate was getting overgrown with vegetation but other than that everything with the crosing looked in good condition. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13F_2011_p_0080 for limited visibility of LS slide gate and WS flap gate.7/9/2013 Same as last inspection.12/4/2013 Same as last inspection.5/28/2014 Same as last inspection. FIELD_STRUCT_DESC: Crossing is part of the Richvale Irrigation District siphon structure. 36 inch CM pipe that drains into Cherokee Canal at about 11.2 feet below the crown. (USACE-1962) Slide gate is located on landward side. Flap gate is located on waterward side. Crossing angles to the southwest to a flap gate & headwall located about 60 feet from waterward toe. This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 9.66). FS Date: 07/16/2015



WS view-access well located 60 feet from WS toe.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	9.56	Rating **	М	Issue No.		930 (cont)	
LM End	9.56	Issue Type +	En	Location *		CR	
Category	Supplemental			GPS Latitude/Longitude			
				Start		End	
Item	DWR UCIP Field Study			39.4774	38 °	39.477438 °	
				-121.73520	00°	-121.735200 °	
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46233

DS_ID:16838 EP_NO: N/A FS_HLM: 9.664 Repair Type: Non

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 Path to access the WS flap gate was getting overgrown with vegetation but other than that everything with the crosing looked in good condition. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13F_2011_p_0080 for limited visibility of LS slide gate and WS flap gate. 7/9/2013 Same as last inspection. 12/4/2013 Same as last inspection. 5/28/2014 Same as last inspection. FIELD_STRUCT_DESC: Crossing is part of the Richvale Irrigation District siphon structure. 36 inch CM pipe that drains into Cherokee Canal at about 11.2 feet below the crown. (USACE-1962) Slide gate is located on landward side. Flap gate is located on waterward side. Crossing angles to the southwest to a flap gate & headwall located about 60 feet from waterward toe. This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 9.66). FS Date: 07/16/2015



View of crossing looking from channel towards WS levee.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	9.57	Rating **	М	Issue No.		931	
LM End	9.57	Issue Type +	En	Location *		CR	
Supplemental Supplemental			GPS Latitude/Longitude				
Calegory	Category			Start		End	
Item	DWR UCI	P Field Study		39.47733	5 °	39.477335 °	
пеш				-121.73534	0 °	-121.735340 °	
DWR ID						·	

Action/Comments

Inspector Comments: FS_ID:46234

DS_ID:16839 EP_NO: N/A FS_HLM: 9.675

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 WS flapgate is silted over and unable to open. Needs to be dug out.Limited inspection on WS and LS slopes due to dense vegetation. Need photos of WS and LS slopes during next inspection with clearned slopes.7/9/2013 Same as last inspection.12/4/2013 Slopes were cleared of vegetation and are in

inspection.12/4/2013 Slopes were cleared of vegetation and are in good condition.5/28/2014 Same as last inspection.

FIELD_STRUCT_DESC: 30 inch corrugated metal pipe with flapgate on the waterward side located approximately 11.5 feet below crown. (USACE-1962) This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 9.68).

FS Date: 07/16/2015

LM Start

LM End





View of crossing from LS. Dense vegetation along LS slope limited visual inspection. (LS Photo 1 of 2)

Photo 2 of 3: UCIP_FA_2015_5123.jpg



WS view of crossing. Dense vegetation along WS slope limited visual inspection. (WS Photo 2 of 2)

** Rating

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable M: Not Inspected/Rated C: Corrected M: M: Minimally Acceptable U: Unacceptable U: Unacceptable M: AV: Acceptable but Monitor & Maintain

** Rating

A: Issue Type

Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	9.57	Rating **	М	Issue No.		931 (cont)
LM End	9.57	Issue Type +	En	Location *		CR
Cotogony	Suppleme	ental		GPS Latitude/Longitu		
Category			Start		End	
Item	DWR UCIP Field Study			39.47733	35 °	39.477335 °
пеш				-121.73534	40 °	-121.735340 °
DWR ID						
		Action/	Comme	nts		
Inspector (DS_ID:168 EP_NO: N	339	: FS_ID:4623	4			

FS_HLM: 9.675 Repair Type: Non-Urgent Crossing Status: Found



WS view of crossing. Dense vegetation along WS slope limited visual inspection. (WS Photo 1 of 2)

LM Start	9.66	Rating **	М	Issue No.		932
LM End	9.66	Issue Type +	En	Location *		CR
Category Supplemental			GPS Latitude/Longitude			
Category			Start		End	
Item	DWR UCI	P Field Study	,	39.47626	60°	39.476260 °
iteiii			-121.73623	30°	-121.736230 °	
DWR ID						·

Action/Comments

Inspector Comments: FS_ID:46236 DS_ID:18912 EP_NO: N/A FS_HLM: 9.764 Repair Type: Non-Urgent

Crossing Status: Indicator Found

UCIP Comments: 6/30/2015 Crossing is in good condition.Unable to determine if crossing is an authorized or unauthorized encroachment. Unable to find permit number for this encroachment. Will need to coordinate with LMA Superintendent and DWR-Inspector, photo includes utility contact information.7/9/2013 Same as last inspection.12/4/2013 Same as last inspection.5/28/2014 Same as last inspection.

FIELD_STRUCT_DESC: Buried fiber optic line through the levee at depth unknown. Owner of line is Qwest Communications 1-800 At Fiber Sign ID Number 16601. (Qwest Communication)

FS Date: 07/16/2015



Marker for buried fiber optic cable on LS with contact information.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	9.66	Rating **	М	Issue No.		932 (cont)		
LM End	9.66	Issue Type +	En	Location *		CR		
Supplemental				GPS Latitude/Longitude				
Calegory	Category					End		
Item	DWR UC	P Field Study		39.4762	60°	39.476260	0	
item				-121.7362	30°	-121.736230	0	
DWR ID								

Action/Comments

Inspector Comments: FS_ID:46236

DS_ID:18912 EP_NO: N/A FS_HLM: 9.764

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 6/30/2015 Crossing is in good condition.Unable to determine if crossing is an authorized or unauthorized encroachment. Unable to find permit number for this encroachment. Will need to coordinate with LMA Superintendent and DWR-Inspector, photo includes utility contact information.7/9/2013 Same as last inspection.12/4/2013 Same as last inspection.5/28/2014 Same as last inspection.

FIELD_STRUCT_DESC: Buried fiber optic line through the levee at depth unknown. Owner of line is Qwest Communications 1-800 At Fiber Sign ID Number 16601. (Qwest Communication)

FS Date: 07/16/2015

LM Start	9.66	Rating **	М	Issue No.	932 (cont)
LM End	9.66	Issue Type +	En	Location *	CR



Marker for buried fiber optic cable on WS.



Overview of levee crown at crossing.

*Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable M: Not Inspected/Rated C: Corrected M: Minimally Acceptable U: Unacceptable U: Unacceptable M: Available M: Available M: Available M: Available M: Available M: Suse Type
Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	9.67	Rating **	U	Issue No.		Issue No.		933
LM End	9.67	Issue Type +	Type + En Loca			CR		
Supplemental				GPS Latitude/Longitude				
Category			Start		End			
Item	DWR UCI	P Field Study		39.4761	40 °	39.476140 °		
item				-121.73639	90°	-121.736390 °		
DWR ID								

Action/Comments

Inspector Comments: FS_ID:46237

DS_ID:18913 EP_NO: N/A FS_HLM: 9.776 Repair Type: Urgent

Crossing Status: Indicator Found



View of LS slope and marker.

LM Start	9.67	Rating **	U	Issue No.	933 (cont)
LM End	9.67	Issue Type +	En	Location *	CR

Photo 2 of 3 : UCIP_FA_2015_5129.jpg



WS marker with utility contact information.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	9.67	Rating **	U	Issue No.		933 (cont)		
LM End	9.67	Issue Type +	En	Location *		CR		
Catagony	Category				GPS Latitude/Longitude			
Calegory				Start		End		
Itom	DWR UCIP Field Study			39.4761	40 °	39.476140 °		
Item				-121.7363	90°	-121.736390 °		
DWR ID								
	A stire (O a server)							

Action/Comments

Inspector Comments: FS_ID:46237

DS_ID:18913 EP_NO: N/A FS_HLM: 9.776 Repair Type: Urgent

Crossing Status: Indicator Found



Overview of levee crown at crossing.

LM Start	9.68	Rating **	М	Issue No.		934	
LM End	9.68	Issue Type +	En	Location *		CR	
Category				GPS Latitude/Longitude			
Calegory						End	
Item	DWR UCI	P Field Study		39.4759	60°	39.475960	0
пеш				-121.7365	40 °	-121.736540	0
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46238

DS ID:18914 EP_NO: N/A FS_HLM: 9.791

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 6/30/2015 Crossing appears to be in good condition. It is still unknown wheter this crossing was authorized or unauthorized. Unable to determine if crossing is an authorized or unauthorized encroachment. Unable to find permit number for this crossing. Will need to coordinate with Pacific Telephone to determine if permit exist for this crossing.7/9/2013 Same as last

inspection.12/4/2013 Same as last inspection.5/28/2014 Same as last inspection.

FIELD_STRUCT_DESC: Underground cable through the levee at depth unknown. Owner of encroachment is Pacific Telephone.

FS Date: 07/16/2015

Photo 1 of 3: UCIP_FA_2015_3738.jpg



Underground cable marker with contact information.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	9.68	Rating **	М	Issue No.		934 (cont)
LM End	9.68	Issue Type +	En	Location *		CR
Category Supplemental			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UCI	IP Field Study		39.4759	60°	39.475960 °
item				-121.7365	40 °	-121.736540 °
DWR ID						·

Action/Comments

Inspector Comments: FS_ID:46238

DS_ID:18914 EP_NO: N/A FS_HLM: 9.791

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 6/30/2015 Crossing appears to be in good condition. It is still unknown wheter this crossing was authorized or unauthorized. Unable to determine if crossing is an authorized or unauthorized encroachment. Unable to find permit number for this crossing. Will need to coordinate with Pacific Telephone to determine if permit exist for this crossing. 7/9/2013 Same as last inspection. 12/4/2013 Same as last inspection. 5/28/2014 Same as

last inspection.
FIELD_STRUCT_DESC: Underground cable through the levee at depth unknown. Owner of encroachment is Pacific Telephone.

FS Date: 07/16/2015

LM Start	9.68	Rating **	М	Issue No.	934 (cont)
LM End	9.68	Issue Type +	En	Location *	CR



Overview of levee crown at crossing.



Marker located on LS.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	9.88	Rating **	М	Issue No.		935
LM End	9.88	Issue Type +	En	Location *		CR
Category	Suppleme	ental		GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCIP Field Study			39.4734	10°	39.473410°
пеш				-121.7381	90°	-121.738190 °
DWR ID						
	Action/Comments					
-	_					

Inspector Comments: FS_ID:46239

DS_ID:17731 EP_NO: 16994 FS_HLM: 9.99

Repair Type: Non-Urgent Crossing Status: Not Found

No Photos

LM Start	10.03	Rating **	М	Issue No.		13	
LM End	10.52	Issue Type +	En	Location *		LS	
Category	Earthen L		GPS La	atitud	e/Longitude		
Calegory			Start		End		
Item	Encroachments			39.471517°		39.465113 °	
Item			-121.739433 °		-121.743592 °		
DWR ID	DWR_MA0	DWR_MA0013_02_s _ 2012_13					
		Action/	Comme	nts			
Ditch							





View of the agricultural ditch along the toe.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	10.55	Rating **	М	Issue No.		936	
LM End	10.55	Issue Type +	En	Location *	LS		
Category Supplemental				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.4647	10°	39.464710	0
пеш				-121.7438	10°	-121.743810	0
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46240

DS_ID:16406 EP_NO: 1238 FS_HLM: 10.67

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 6/30/2015 Crossing appears in good condition.

Permit was approved for 6-5/8 inch diameter not 8 inch. The permit granted permission to construct pipe to cross Cherokee Canal, Butte Creek, Clear Creek, & Ash Creek. The O&M manual list an 8 inch steel gas line at HLM 10.67, unable to determine if the gas line is the same crossing. Will need to contact applicant to obtain records.7/8/2013 Same as last inspection.12/4/2013 Same as last inspection.5/28/2014 Same as last inspection.

FIELD_STRUCT_DESC: 8-inch gas pipe through the levee at unknown elevation. (Permit No. 1238-1947) Utility marker visible at the upstream face of highway bridge. Buried utility crosses bridge and crosses left bank of Cherokee Canal downstream of highway bridge. This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 10.67).

FS Date: 07/16/2015

Photo 1 of 3 : UCIP_FA_2015_5315.jpg



Downstream utility marker is located across highway.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	10.55	Rating **	М	Issue No.		936 (cont)	
LM End	10.55	Issue Type +	En	Location *	LS		
Category				GPS Latitude/Longitude			
Category		Start		End			
Itom	DWR UCI	IP Field Study		39.46471	o °	39.464710	0
Item				-121.74381	o °	-121.743810	0
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46240

DS_ID:16406 EP_NO: 1238 FS_HLM: 10.67

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 6/30/2015 Crossing appears in good condition.

Permit was approved for 6-5/8 inch diameter not 8 inch. The permit granted permission to construct pipe to cross Cherokee Canal, Butte Creek, Clear Creek, & Ash Creek. The O&M manual list an 8 inch steel gas line at HLM 10.67, unable to determine if the gas line is the same crossing. Will need to contact applicant to obtain records.7/8/2013 Same as last inspection.12/4/2013 Same as last inspection.5/28/2014 Same as last inspection.

FIELD_STRUCT_DESC: 8-inch gas pipe through the levee at unknown elevation. (Permit No. 1238-1947) Utility marker visible at the upstream face of highway bridge. Buried utility crosses bridge and crosses left bank of Cherokee Canal downstream of highway bridge. This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 10.67).

FS Date: 07/16/2015

Photo 2 of 3 : UCIP_FA_2015_5316.jpg

Utility marker is located near the upstream face of the highway bridge.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	10.55	Rating **	М	Issue No.		936 (cont)	
LM End	10.55	Issue Type +	En	Location *		LS	
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.4647	10°	39.464710 °	
пеш				-121.7438	10°	-121.743810 °	
DWR ID						·	

Action/Comments

Inspector Comments: FS_ID:46240

DS_ID:16406 EP_NO: 1238 FS_HLM: 10.67

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 6/30/2015 Crossing appears in good condition.

Permit was approved for 6-5/8 inch diameter not 8 inch. The permit granted permission to construct pipe to cross Cherokee Canal, Butte Creek, Clear Creek, & Ash Creek. The O&M manual list an 8 inch steel gas line at HLM 10.67, unable to determine if the gas line is the same crossing. Will need to contact applicant to obtain records.7/8/2013 Same as last inspection.12/4/2013 Same as last inspection.5/28/2014 Same as last inspection.

FIELD_STRUCT_DESC: 8-inch gas pipe through the levee at unknown elevation. (Permit No. 1238-1947) Utility marker visible at the upstream face of highway bridge. Buried utility crosses bridge and crosses left bank of Cherokee Canal downstream of highway bridge. This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 10.67).

FS Date: 07/16/2015

Photo 3 of 3: UCIP_FA_2015_5317.jpg



Utility is angled. Alignment crosses highway.

LM Start	10.59	Rating **	М	Issue No.		18
LM End	11.66	Issue Type +	En	Location *		LS
Category	evee	GPS Latitude/Longitude				
Category			Start		End	
Item	Encroach	ments	nents			39.450333 °
item				-121.74417	72 °	-121.753157 °
DWR ID	DWR_MA0013_02_s _ 2012_18					
Action/Comments						
Ditch						



View of the agricultural ditch along the toe.

* Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

** Rating

A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable U : Unacceptable U : Unacceptable A/W : Acceptable but Monitor & Maintain

** Rating

A : Asceptable N : Not Inspected/Rated M : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	10.61	Rating **	Α	Issue No.		53	
LM End	10.61	Issue Type +	Ма	Location *	Location * LS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory	alegory			Start		End	
Item	Vegetatio	n		39.4639	58 °	39.463958	0
item				-121.7443	65 °	-121.744365	0
DWR ID DWR_MA0013_02_f _ 2015_53						_	
Action/Comments							

Control annual grass and weeds on the levee slopes and easements. Inspector Comments: Sutter Yard burned and dragged both slopes.



View of no vegetation on both slopes.

LM Start	12.88	Rating **	М	Issue No.		937
LM End	12.88	Issue Type +	En	Location *		LS
Category	Suppleme	ental	GPS Latitude/Longitude			
Calegory						End
Item	DWR UCI	P Field Study		39.4347	79 °	39.434779 °
Item				-121.7639	40 °	-121.763940 °
DWR ID						

Action/Comments

Inspector Comments: FS_ID:46242

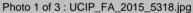
DS ID:16385 EP_NO: N/A FS_HLM: 13.03

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 WS heavily vegetated passed the toeroad and could not make it to the WS pipe end for inspection. Vegetation needs to be cleared back. LS pipe end was fully submerged under water.LS pipe & slide gate sedimented in. Limited inspection WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13F_2011_p_0147 for limited visibility of LS and WS.7/8/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall is now visible but mostly underwater so unable to do full inspection. WS is still vegetated.12/4/2013 Same as last inspection.5/28/2014 Same as last inspection.

FIELD_STRUCT_DESC: 30-inch corrugated metal pipe through the levee, 13.0 feet below the crown. Slide gate in corrugated metal pipe riser on the waterward slope. Slide gate in ditch on the landward side. Pipe under channel is a 24-inch Delleher siphon (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 13.03).

FS Date: 07/16/2015





View of the inside of the WS stand pipe. No obstructions blocking slide

* Location	** Rating		+ Issue Type	
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement	

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	12.88	Rating **	М	Issue No.		937 (cont)	
LM End	12.88	Issue Type +	En	Location *		LS	
Category	ental	GPS Latitude/Longitude					
Calegory			Start		End		
Item	DWR UC	P Field Study		39.4347	79 °	39.434779	۰
item				-121.7639	40 °	-121.763940	٥
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46242

DS_ID:16385 EP_NO: N/A FS_HLM: 13.03 Repair Type: Nor

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 WS heavily vegetated passed the toeroad and could not make it to the WS pipe end for inspection. Vegetation needs to be cleared back. LS pipe end was fully submerged under water.LS pipe & slide gate sedimented in. Limited inspection WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13F_2011_p_0147 for limited visibility of LS and WS.7/8/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall is now visible but mostly underwater so unable to do full inspection. WS is still vegetated.12/4/2013 Same as last inspection.5/28/2014 Same as last inspection.

FIELD_STRUCT_DESC: 30-inch corrugated metal pipe through the levee, 13.0 feet below the crown. Slide gate in corrugated metal pipe riser on the waterward slope. Slide gate in ditch on the landward side. Pipe under channel is a 24-inch Delleher siphon (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 13.03).

FS Date: 07/16/2015



Overview of crossing looking downstream at the left bank of Cherokee Canal.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	12.88	Rating **	М	Issue No.		937 (cont)		
LM End	12.88	Issue Type +	En	Location *	ation * LS			
Category	Supplemental				GPS Latitude/Longitude			
Calegory						End		
Item	DWR UCI	IP Field Study		39.43477	'9 °	39.434779 °		
пеш				-121.76394	0°	-121.763940 °		
DWR ID						·		

Action/Comments

Inspector Comments: FS_ID:46242

DS_ID:16385 EP_NO: N/A FS_HLM: 13.03 Repair Type: Non-Urgent

Crossing Status: Found

UCIP Comments: 6/30/2015 WS heavily vegetated passed the toeroad and could not make it to the WS pipe end for inspection. Vegetation needs to be cleared back. LS pipe end was fully submerged under water.LS pipe & slide gate sedimented in. Limited inspection WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13F_2011_p_0147 for limited visibility of LS and WS.7/8/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall is now visible but mostly underwater so unable to do full inspection. WS is still vegetated.12/4/2013 Same as last inspection.5/28/2014 Same as last inspection.

FIELD_STRUCT_DESC: 30-inch corrugated metal pipe through the levee, 13.0 feet below the crown. Slide gate in corrugated metal pipe riser on the waterward slope. Slide gate in ditch on the landward side. Pipe under channel is a 24-inch Delleher siphon (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 13.03).

FS Date: 07/16/2015

Photo 3 of 3: UCIP_FA_2015_5320.jpg



Stand pipe with screw gate WS

LM Start	13.40	Rating **	М	Issue No.		19	
LM End	16.88	Issue Type +	En	Location *		LS	
Earthen Levee			GPS La	atitud	le/Longitude		
Category				Start		End	
Item	Encroachments			39.4281	92 °	39.406240 °	
item				-121.7684	43 °	-121.794863 °	
DWR ID	DWR_MA0	013_02_s _ 20 ⁴	12_19				
		Action/	Comme	nts			
Ditch							



View of the agricultural ditch along the toe.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	15.44	Rating **	М	Issue No.		938
LM End	15.44	Issue Type +	En	Location *		LS
Category	Suppleme		GPS La	titud	le/Longitude	
Calegory				Start		End
Item	DWR UCI	P Field Study		39.4192	09°	39.419209 °
item				-121.7736	80 °	-121.773680 °
DWR ID						

Action/Comments

Inspector Comments: FS_ID:46243

DS_ID:16376 EP_NO: N/A FS_HLM: 15.618 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 Still unable to locate the LS pipe end.

Could not find LS end of pipe. Limited inspection on WS and LS slopes and toe due to dense vegetation. Need photos of cleared WS and LS slopes, and LS headwall during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0011 for WS gate blocked by vegetation.7/8/2013 WS slope has been cleared of vegetation and is in good condition. LS slope also cleared of vegetation but still very dense on LS toe and unbale to locate LS headwall.12/4/2013 Same as last inspection. WS flapgate was bolted shut to keep LS ricefield flooded.5/28/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal pipe through the levee, 10.1 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 15.62).

FS Date: 07/16/2015



Overview of crossing looking downstream at the left bank of Cherokee Canal.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	15.44	Rating **	М	Issue No.		938 (cont)
LM End	15.44	Issue Type +	En	Location *		LS
Category	Suppleme	ental		GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P Field Study		39.41920	9 °	39.419209 °
пеш				-121.77368	0 °	-121.773680 °
DWR ID						

Action/Comments

Inspector Comments: FS_ID:46243

DS_ID:16376 EP_NO: N/A FS_HLM: 15.618 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 Still unable to locate the LS pipe end.

Could not find LS end of pipe. Limited inspection on WS and LS slopes and toe due to dense vegetation. Need photos of cleared WS and LS slopes, and LS headwall during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0011 for WS gate blocked by vegetation.7/8/2013 WS slope has been cleared of vegetation and is in good condition. LS slope also cleared of vegetation but still very dense on LS toe and unbale to locate LS headwall.12/4/2013 Same as last inspection. WS flapgate was bolted shut to keep LS ricefield flooded.5/28/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal pipe through the levee, 10.1 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 15.62).

FS Date: 07/16/2015



View of WS headwall and flap gate.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	15.44	Rating **	М	Issue No.		938 (cont)
LM End	15.44	Issue Type +	En	Location *		LS
Category	Suppleme	emental GPS Latitude/Long			le/Longitude	
Calegory			Start			End
Item	DWR UCI	P Field Study		39.41920)9 °	39.419209 °
пеш				-121.77368	30 °	-121.773680 °
DWR ID						

Action/Comments

Inspector Comments: FS_ID:46243

DS_ID:16376 EP_NO: N/A FS_HLM: 15.618 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 Still unable to locate the LS pipe end.

Could not find LS end of pipe. Limited inspection on WS and LS slopes and toe due to dense vegetation. Need photos of cleared WS and LS slopes, and LS headwall during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0011 for WS gate blocked by vegetation.7/8/2013 WS slope has been cleared of vegetation and is in good condition. LS slope also cleared of vegetation but still very dense on LS toe and unbale to locate LS headwall.12/4/2013 Same as last inspection. WS flapgate was bolted shut to keep LS ricefield flooded.5/28/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal pipe through the levee, 10.1 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 15.62).

FS Date: 07/16/2015



Dense vegetation covering the majority of the WS. WS headwall difficult to see through dense vegetation.

N: Not Inspected/Rated Corrected

Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	15.68	Rating **	М	Issue No.		939
LM End	15.68	Issue Type +	En	Location *		LS
Supplemental GPS Latitu				ituc	le/Longitude	
Category				Start		End
Item	DWR UCI	P Field Study		39.41704	3°	39.417043 °
пеш				-121.77724	0 °	-121.777240 °
DWR ID						

Action/Comments

Inspector Comments: FS_ID:46245

DS_ID:16382 EP_NO: N/A FS_HLM: 15.864 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 LS headwall stil buried somewhere. WS looked to be in good condition.LS headwall buried. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. Need to determine the fate of LS headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0022 -- unknown issue.7/8/2013 Same as last inspection.12/4/2013 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal pipe through the levee, 9.0 feet below the crown. Flap gate on waterward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 15.87).

FS Date: 07/16/2015



View of WS headwall.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	15.68	Rating **	М	Issue No.		939 (cont)
LM End	15.68	Issue Type +	En	Location *		LS
Category	Supplemental			GPS La	tituc	le/Longitude
Calegory				Start		End
Item	DWR UC	P Field Study		39.41704	ı3°	39.417043
пеш				-121.77724	° Ol	-121.777240
DWR ID					·	

Action/Comments

Inspector Comments: FS_ID:46245

DS_ID:16382 EP_NO: N/A FS_HLM: 15.864 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 LS headwall stil buried somewhere. WS looked to be in good condition.LS headwall buried. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. Need to determine the fate of LS headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0022 -- unknown issue.7/8/2013 Same as last inspection.12/4/2013 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal pipe through the levee, 9.0 feet below the crown. Flap gate on waterward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 15.87).

FS Date: 07/16/2015



View of WS slope. Limited inspection due to the dense vegetation.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	15.68	Rating **	М	Issue No.		939 (cont)		
LM End	15.68	Issue Type +	En	Location *		LS		
Category	Suppleme	ental		GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCI	P Field Study		39.4170	43 °	39.417043		
пеш				-121.7772	40 °	-121.777240		
DWR ID								

Action/Comments

Inspector Comments: FS_ID:46245

DS_ID:16382 EP_NO: N/A FS_HLM: 15.864 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 LS headwall stil buried somewhere. WS looked to be in good condition.LS headwall buried. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. Need to determine the fate of LS headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0022 -- unknown issue.7/8/2013 Same as last inspection.12/4/2013 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal pipe through the levee, 9.0 feet below the crown. Flap gate on waterward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 15.87).

FS Date: 07/16/2015



Overview of crossing looking downstream of the left bank of Cherokee

LM Start	15.97	Rating **	М	Issue No.	No. 61			
LM End	15.97	Issue Type +	Ma	Location *		WS		
Category Earthen Levee				GPS Latitude/Longitude				
Calegory	Category				Start			
Item	Encroach	ments		39.4144	48 °	39.414448	0	
пеш				-121.7815	32 °	-121.781532	0	
DWR ID DWR_MA0013_02_s _ 2015_61								
	Action/Comments							

Tree or limb

Inspector Comments: Remove the tree from the waterside slope and toe.

Photo 1 of 1 : FA_2015_MA0013_301_61_20150910_00018.jpg



View of the tree along the waterside toe and slope.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	16.07	Rating **	М	Issue No.		940		
LM End	16.07	Issue Type +	En	Location *		WS		
Category	Supplemental				GPS Latitude/Longitude			
Calegory				Start		End		
Item	DWR UC	P Field Study		39.41359	5°	39.413595 °		
item				-121.78289	0 °	-121.782890 °		
DWR ID								

Action/Comments

Inspector Comments: FS_ID:46246

DS_ID:16377 EP_NO: N/A FS_HLM: 16.252 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 Bee boxes stacked near the riser box on WS so could not get close enough to see if the leak issue had been fixed. Limited inspection on LS slope due to dense vegetation. Need photos of cleared LS slope and LS headwall. Cracks in riser box. New pump installed recently this work might be covered under seperate permit.7/8/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall was underwater and unable to be inspected. All WS appurtances in good condition.12/4/2013 Same as last inspection.5/28/2014 Water appears to be leaking out of the WS concrete riser box. Causing minor erosion under pipe near pump structure.

FIELD_STRUCT_DESC: 36-inch corrugated metal pipe through the levee, 11.7 feet below the crown. Slide gate in corrugated metal pipe riser on the waterward slope. Concrete "U" headwall on the landward side. Pipe discharges into distribution box on the waterside. Divers on dam in stream. Pump located on the waterward berm, pumps water from diversion dam into distribution box. Water then flows back through the levee to the landward field. Provision can be made to send water over streambed to irrigation overflow area (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in the O&M manual (HLM 16.26).

FS Date: 07/16/2015



Overview of levee crown.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	16.07	Rating **	М	Issue No.		Issue No.		940 (cont)	
LM End	16.07	07 Issue Type + En Location *		Location *		Location *		WS	
Category	Supplemental				GPS Latitude/Longitude				
Calegory			Start		End				
Item	DWR UC	P Field Study		39.4135	95 °	39.413595	0		
item				-121.7828	90°	-121.782890	0		
DWR ID									

Action/Comments

Inspector Comments: FS_ID:46246

DS_ID:16377 EP_NO: N/A FS_HLM: 16.252 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 Bee boxes stacked near the riser box on WS so could not get close enough to see if the leak issue had been fixed. Limited inspection on LS slope due to dense vegetation. Need photos of cleared LS slope and LS headwall. Cracks in riser box. New pump installed recently this work might be covered under seperate permit.7/8/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall was underwater and unable to be inspected. All WS appurtances in good condition.12/4/2013 Same as last inspection.5/28/2014 Water appears to be leaking out of the WS concrete riser box. Causing minor erosion under pipe near pump structure.

FIELD_STRUCT_DESC: 36-inch corrugated metal pipe through the levee, 11.7 feet below the crown. Slide gate in corrugated metal pipe riser on the waterward slope. Concrete "U" headwall on the landward side. Pipe discharges into distribution box on the waterside. Divers on dam in stream. Pump located on the waterward berm, pumps water from diversion dam into distribution box. Water then flows back through the levee to the landward field. Provision can be made to send water over streambed to irrigation overflow area (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in the O&M manual (HLM 16.26). FS Date: 07/16/2015



WS view of crossing.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	16.07	Rating **	М	Issue No.		Issue No.		940 (cont)
LM End	16.07 Issue Type +		En	Location *		Location *		WS
Category Supplemental				GPS Latitude/Longitude				
Calegory						End		
Item	DWR UCI	IP Field Study		39.4135	95 °	39.413595		
itelli			-121.7828	90°	-121.782890			
DWR ID								

Action/Comments

Inspector Comments: FS_ID:46246

DS_ID:16377 EP_NO: N/A FS_HLM: 16.252 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 Bee boxes stacked near the riser box on WS so could not get close enough to see if the leak issue had been fixed. Limited inspection on LS slope due to dense vegetation. Need photos of cleared LS slope and LS headwall. Cracks in riser box. New pump installed recently this work might be covered under seperate permit.7/8/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall was underwater and unable to be inspected. All WS appurtances in good condition.12/4/2013 Same as last inspection.5/28/2014 Water appears to be leaking out of the WS concrete riser box. Causing minor erosion under pipe near pump structure.

FIELD_STRUCT_DESC: 36-inch corrugated metal pipe through the levee, 11.7 feet below the crown. Slide gate in corrugated metal pipe riser on the waterward slope. Concrete "U" headwall on the landward side. Pipe discharges into distribution box on the waterside. Divers on dam in stream. Pump located on the waterward berm, pumps water from diversion dam into distribution box. Water then flows back through the levee to the landward field. Provision can be made to send water over streambed to irrigation overflow area (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in the O&M manual (HLM 16.26).



Appurtances on WS.

Photo 1 of 1 : FA_2015_MA0013_301_54_20150910_00013.jpg

LM Start	16.52	Rating **	М	Issue No.		54	
LM End	16.52	Issue Type +	Ma	Location *		WS	
Category Earthen Levee				GPS Latitude/Longitude			
Calegory	egory					End	
Item	Animal Co	ontrol		39.4095	48 °	39.409548 °	
iteiii				-121.7896	68 °	-121.789668 °	
DWR ID DWR_MA0013_02_f _ 2014_54							
Action/Comments							

Action/Comments

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comments: Repair the rodent holes along the water side slope.



View of the rodent holes and bait station along the waterside slope.

* Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

** Rating

A : Acceptable N: Not Inspected/Rated M: Minimally Acceptable U: Unacceptable U: Unacceptable WA: Acceptable WA: Acceptable but Monitor & Maintain

** Rating

A : Not Inspected/Rated Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	16.86	Rating **	М	Issue No.		941			
LM End	16.86	Issue Type +	En	Location *	WS				
Category	Suppleme	Supplemental			GPS Latitude/Longitude				
Calegory				Start En		End			
Item	DWR UCI	P Field Study		39.40641	° OI	39.406410	٥		
item				-121.79460	00°	-121.794600	0		
DWR ID									

Action/Comments

Inspector Comments: FS_ID:46247

DS_ID:16841 EP_NO: N/A FS_HLM: 17.06

Repair Type: Non-Urgent Crossing Status: Not Found

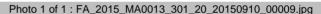
UCIP Comments: 6/30/2015 Unable to locate. Dense vegetation limited inspection will need to verify is an features are still present at this location during the next inspection. 7/8/2013 Same as last inspection. Unable to locate. 12/4/2013 Unable to locate. 5/28/2014 Same as last inspection.

FIELD_STRUCT_DESC: 36 inch corrugated metal pipe through the levee at approximately 14.5 feet below crown. There is a flapgate located on the waterward side. (USACE-1962) This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 17.06).

FS Date: 07/16/2015

LM Start	17.05	Rating **	М	Issue No.		20
LM End	18.72	Issue Type +	En	Location *		LS
Category Earthen Levee				GPS La	atitud	de/Longitude
Category				Start		End
Item	Encroachments				0	39.389187 °
пеш					0	-121.821233 °
DWR ID	DWR_MA0	013_02_s _ 201	12_20			
		Action/	Comme	nts		
Ditch						

No Photos





View of the agricultural ditch along the toe.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	18.16 Rating ** M		Issue No.		942			
LM End	18.16 Issue Type + En		Location *		LS			
Catagony	Supplemental			GPS Latitude/Longitude				
Category				Start		End		
Item	DWR UC	DWR UCIP Field Study			06 °	39.394406		
item				-121.8131	80 °	-121.813180		
DWR ID						·		

Action/Comments

Inspector Comments: FS_ID:46249

DS_ID:16379 EP_NO: N/A FS_HLM: 18.369 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 Vegetation still presenton WS. LS side was underwater during inspection.Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0134 for unknown culvert size on LS and no outlet visible on WS.7/8/2013 LS slope cleared of vegeatation and is in good condition. WS is still vegetated. LS pipe end under water and blocked off by plywood so unable to measure culvert size.12/4/2013 Same as last inspection.5/28/2014 Same as last inspection.

FIELD_STRUCT_DESC: 36-inch corrugated metal pipe through the levee, 13.2 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 18.37).

FS Date: 07/16/2015



View of WS slope and berm.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	18.16	18.16 Rating ** M		Issue No.		942 (cont)	
LM End	18.16	18.16 Issue Type + En		Location *		LS	
Category Supplemental			GPS Latitude/Longitude				
				Start		End	
Item	DWR UCI	DWR UCIP Field Study)6°	39.394406 °	
item					30°	-121.813180 °	
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46249

DS_ID:16379 EP_NO: N/A FS_HLM: 18.369 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 Vegetation still presenton WS. LS side was underwater during inspection.Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0134 for unknown culvert size on LS and no outlet visible on WS.7/8/2013 LS slope cleared of vegeatation and is in good condition. WS is still vegetated. LS pipe end under water and blocked off by plywood so unable to measure culvert size.12/4/2013 Same as last inspection.5/28/2014 Same as last inspection.

FIELD_STRUCT_DESC: 36-inch corrugated metal pipe through the levee, 13.2 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 18.37).

FS Date: 07/16/2015



Overview of crossing looking D/S at left bank of Cherokee Canal.

N: Not Inspected/Rated Corrected A/W: Acceptable but Monitor & Maintain Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	18.16	Rating **	g ** M Issu			942 (cont)	
LM End	18.16	Issue Type +	En	Location * LS		LS	
Category Supplemental			GPS La	atitud	e/Longitude		
				Start		End	
Item	DWR UC	IP Field Study		39.3944	06 °	39.394406	0
item				-121.8131	80 °	-121.813180	0
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46249

DS_ID:16379 EP_NO: N/A FS_HLM: 18.369 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 Vegetation still presenton WS. LS side was underwater during inspection.Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0134 for unknown culvert size on LS and no outlet visible on WS.7/8/2013 LS slope cleared of vegeatation and is in good condition. WS is still vegetated. LS pipe end under water and blocked off by plywood so unable to measure culvert size.12/4/2013 Same as last inspection.5/28/2014 Same as last inspection.

FIELD_STRUCT_DESC: 36-inch corrugated metal pipe through the levee, 13.2 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 18.37).

FS Date: 07/16/2015

Photo 3 of 3: UCIP_FA_2015_5415.jpg



View of flap gate located on WS.

LM Start	19.37	Rating **	М	Issue No.		21	
LM End	19.92	Issue Type +	En	Location *		LS	
Category Earthen Levee				GPS La	titud	e/Longitude	
				Start		End	
Item	Encroachments			39.3832	52 °	39.378192 °	
item				-121.83056	65 °	-121.838543 °	
DWR ID	DWR_MA0013_02_s _ 2012_21						
	Action/Comments						
Ditch							



View of the agricultural ditch along the toe.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	19.92	Rating **	М	Issue No.	943			
LM End	19.92	Issue Type +	En	Location *	LS			
Category				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCI	OWR UCIP Field Study			8 °	39.378198 °		
пеш				-121.83857	0 °	-121.838570 °		
DWR ID						·		

Action/Comments

Inspector Comments: FS_ID:46252

DS_ID:16375 EP_NO: N/A FS_HLM: 20.148 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 Erosioon still present behind the WS headwall. Everyhting thing else with the crossing appeared to be in good condition. Erosion present behind WS headwall. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. 7/8/2013 Erosion problem same as last inspection. WS and LS slopes have been cleared of vegetation and are in good shape. 12/4/2013 Same as last inspection. 5/28/2014 Same as last inspection.

FIELD_STRUCT_DESC: 30-inch corrugated metal pipe through the levee, 13.1 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 20.15).

FS Date: 07/16/2015

Photo 1 of 3 : UCIP_FA_2015_3760.jpg



Erosion behind WS headwall at the upstream edge of headwall.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	19.92	Rating ** M		Issue No.		943 (cont)
LM End	19.92	Issue Type +	En	Location * LS		LS
Category Supplemental			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UC	DWR UCIP Field Study			98 °	39.378198 °
пеш				-121.83857	70 °	-121.838570 °
DWR ID						

Action/Comments

Inspector Comments: FS_ID:46252

DS_ID:16375 EP_NO: N/A FS_HLM: 20.148 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 Erosioon still present behind the WS headwall. Everyhting thing else with the crossing appeared to be in good condition. Erosion present behind WS headwall. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. 7/8/2013 Erosion problem same as last inspection. WS and LS slopes have been cleared of vegetation and are in good shape. 12/4/2013 Same as last inspection. 5/28/2014 Same as last inspection.

FIELD_STRUCT_DESC: 30-inch corrugated metal pipe through the levee, 13.1 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 20.15).

FS Date: 07/16/2015



Erosion behind WS headwall looking at the downstream edge of headwall.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	19.92	Rating ** M		Issue No.		943 (cont)	
LM End	19.92	Issue Type +	En	Location *		LS	
Category Supplemental			GPS Latitude/Longitude				
Calegory				Start		End	
Item	DWR UCI	DWR UCIP Field Study			98 °	39.378198	0
пеш				-121.8385	70°	-121.838570	0
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46252

DS_ID:16375 EP_NO: N/A FS_HLM: 20.148 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 Erosioon still present behind the WS headwall. Everyhting thing else with the crossing appeared to be in good condition. Erosion present behind WS headwall. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. 7/8/2013 Erosion problem same as last inspection. WS and LS slopes have been cleared of vegetation and are in good shape. 12/4/2013 Same as last inspection. 5/28/2014 Same as last inspection.

FIELD_STRUCT_DESC: 30-inch corrugated metal pipe through the levee, 13.1 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 20.15).

FS Date: 07/16/2015



Flap gate located on the WS.

LM Start	20.45	Rating **	М	Issue No.		51	
LM End	20.45	Issue Type +	Ma	Location *		LS	
Category Earthen Levee				GPS La	atitud	e/Longitude	
Calegory	alegory					End	
Item	Encroach	ments		39.3729	12 °	39.372912	0
пеш				-121.84550	00°	-121.845500	0
DWR ID DWR_MA0013_02_s _ 2015_51							
		Action/	Comme	nts			

Tree or limb

Inspector Comments: Remove the tree limbs from the landside toe.



View of the tree limbs along the landside toe.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	20.48	Rating **	М	Issue No.	6		
LM End	20.75	Issue Type +	Ма	Location *	LS		
Category	evee	GPS Latitude/Longitude					
Calegory			Start End				
Item	Trim / Thi	n Trees		39.372724°		39.370732	0
item				-121.84602	22 °	-121.850282	0
DWR ID DWR_MA0013_02_s _ 2013_6							
Action/Comments							

Trim trees to at least five feet above ground level. Inspector Comments: Trim the trees 5 feet to allow visibility.



Trim the trees 5 feet to allow visibility along the landside slope.

LM Start	20.65	Rating **	М	Issue No.		52	
LM End	20.65	Issue Type +	Ма	Location *	LS		
Category	evee	GPS Latitude/Longitude					
Calegory				Start End			
Item	Encroach	ments		39.37143	33 °	39.371433	٥
item				-121.8487	53 °	-121.848753	0
DWR ID DWR_MA0013_02_s _ 2014_52							
	Action/Comments						

Tree or limb

Inspector Comments: Remove the tree limbs from the landside slope and toe.



View of the trees limbs along the landside slope and toe.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	20.76	Rating **	U	Issue No.		944	
LM End	20.76	Issue Type +	En	Location *		LS	
Category	ental	GPS Latitude/Longitude					
Calegory			Start		End		
Item	DWR UC	P Field Study		39.3706	76 °	39.370676	0
itelli				-121.8504	90 °	-121.850490	0
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46253

DS_ID:16383 EP_NO: N/A FS_HLM: 21.001 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 Cossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion.LS pipe collars severely damaged--section missing at flapgate. Buried section of pipe could be in the same condition. Crossing needs to be repaired; will need to coordinate with applicant. WS slide gate handle missing.7/8/2013 Same as last inspection.12/4/2013 Same as last

inspection.5/28/2014 Same as last inspection.

FIELD_STRUCT_DESC: 1 of 3: 16-inch steel pipes encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates on corrugated metal pipe risers on the waterward slope. Pump structure on the waterward end (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 21.00).

FS Date: 07/16/2015



Corrugated metal pipe risers with slide gates located on WS slope.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	20.76	Rating **	U	Issue No.		944 (cont)
LM End	20.76	Issue Type +	En	Location *		LS
Category			GPS Latitude/Longitude			
Calegory	egory			Start		End
Item	DWR UCI	IP Field Study		39.3706	76°	39.370676 °
пеш			-121.8504	90°	-121.850490 °	
DWR ID						

Action/Comments

Inspector Comments: FS_ID:46253

DS_ID:16383 EP_NO: N/A FS_HLM: 21.001 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 Cossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion.LS pipe collars severely damaged--section missing at flapgate. Buried section of pipe could be in the same condition. Crossing needs to be repaired; will need to coordinate with applicant. WS slide gate handle missing.7/8/2013 Same as last inspection.12/4/2013 Same as last

inspection.5/28/2014 Same as last inspection.

FIELD_STRUCT_DESC: 1 of 3: 16-inch steel pipes encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates on corrugated metal pipe risers on the waterward slope. Pump structure on the waterward end (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 21.00).

FS Date: 07/16/2015



Corrugated metal pipe riser for pipe 1 of 3. Slide gate is missing handle.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	20.76	Rating **	U	Issue No.		944 (cont)
LM End	20.76	Issue Type +	En	Location *		LS
Category			GPS Latitude/Longitude			
Calegory	tegory			Start		End
Item	DWR UCI	P Field Study		39.3706	76°	39.370676°
item			-121.8504	90°	-121.850490 °	
DWR ID						

Action/Comments

Inspector Comments: FS_ID:46253

DS_ID:16383 EP_NO: N/A FS_HLM: 21.001 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 Cossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion.LS pipe collars severely damaged--section missing at flapgate. Buried section of pipe could be in the same condition. Crossing needs to be repaired; will need to coordinate with applicant. WS slide gate handle missing.7/8/2013 Same as last inspection.12/4/2013 Same as last

inspection.5/28/2014 Same as last inspection.

FIELD_STRUCT_DESC: 1 of 3: 16-inch steel pipes encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates on corrugated metal pipe risers on the waterward slope. Pump structure on the waterward end (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 21.00).

FS Date: 07/16/2015



Sink hole observed behind WS headwall at the downstream edge of headwall. (Sink hole picture 1 of 2)

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	20.76	Rating **	U	Issue No.		945
LM End	20.76	Issue Type +	En	Location *		LS
Category	ental	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UC	P Field Study		39.3706	79 °	39.370679
item				-121.8505	00 °	-121.850500
DWR ID						

Action/Comments

Inspector Comments: FS_ID:46255

DS_ID:17185 EP_NO: N/A FS_HLM: 21.002 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 Cossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion. Sink hole present on WS. LS pipe collars severely damaged--section missing at flapgate. Crossing needs repair. Need to coordinate with owner. 7/8/2013

Same as last inspection.12/4/2013 Same as last inspection.5/28/2014 Same as last inspection.

FIELD_STRUCT_DESC: 3 of 3: 16-inch steel pipe encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates on corrugated metal pipe risers on the waterward slope. Pump structure on the waterward end (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 21.00).

FS Date: 07/16/2015



View of corrugated metal risers located on WS.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	20.76	Rating **	U	Issue No.		945 (cont)	
LM End	20.76	Issue Type +	En	Location *		LS	
Supplemental			GPS Latitude/Longitude				
Category			Start		End		
Item	DWR UC	DWR UCIP Field Study			79 °	39.370679	
item		-		-121.8505	00 °	-121.850500	
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46255

DS_ID:17185 EP_NO: N/A FS_HLM: 21.002 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 Cossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion. Sink hole present on WS. LS pipe collars severely damaged--section missing at flapgate. Crossing needs repair. Need to coordinate with owner. 7/8/2013

Same as last inspection.12/4/2013 Same as last inspection.5/28/2014 Same as last inspection.

FIELD_STRUCT_DESC: 3 of 3: 16-inch steel pipe encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates on corrugated metal pipe risers on the waterward slope. Pump structure on the waterward end (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 21.00).

FS Date: 07/16/2015



View of Pipe 3 of 3 from WS headwall.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	20.76	Rating **	U	Issue No.		945 (cont)	
LM End	20.76	Issue Type +	En	Location *		LS	
Supplemental			GPS Latitude/Longitude				
Category			Start		End		
Item	DWR UC	DWR UCIP Field Study			79 °	39.370679	
item		-		-121.8505	00 °	-121.850500	
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46255

DS_ID:17185 EP_NO: N/A FS_HLM: 21.002 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 Cossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion. Sink hole present on WS. LS pipe collars severely damaged--section missing at flapgate. Crossing needs repair. Need to coordinate with owner.7/8/2013

Same as last inspection.12/4/2013 Same as last inspection.5/28/2014 Same as last inspection.

FIELD_STRUCT_DESC: 3 of 3: 16-inch steel pipe encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates on corrugated metal pipe risers on the waterward slope. Pump structure on the waterward end (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 21.00).

FS Date: 07/16/2015



View of corrugated metal pipe for pipe 3 of 3.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	20.76	Rating **	U	Issue No.		946					
LM End	20.76	Issue Type +	En	Location *		Location *		Location *		LS	
Supplemental			GPS Latitude/Longitude								
Category			Start		End						
Itom	DWR UCI	DWR UCIP Field Study			79 °	39.370679	0				
Item		-121.8505	00 °	-121.850500	0						
DWR ID											

Action/Comments

Inspector Comments: FS_ID:46254

DS_ID:17014 EP_NO: N/A FS_HLM: 21.002 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 Cossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion.LS pipe collars severely damaged--section missing at flapgate. Crossing needs repair. Will need to coordinate with owner.7/8/2013 Same as last inspection.12/4/2013 Same as last inspection.5/28/2014 Same as

last inspection.

FIELD_STRUCT_DESC: 2 of 3: 16-inch steel pipe encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates on corrugated metal pipe risers on the waterward slope. Pump structure on the waterward end (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 21.00).

FS Date: 07/16/2015



View of pipe 2. Pipe 2 diverts flow to pipe 1.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	20.76	Rating **	U	Issue No.		946 (cont)	
LM End	20.76	Issue Type +	En	Location *		LS	
Supplemental			GPS Latitude/Longitude				
Calegory	Category			Start		End	
Item	DWR UC	DWR UCIP Field Study			79 °	39.370679	
item		•		-121.8505	00°	-121.850500	
DWR ID							

Action/Comments

Inspector Comments: FS_ID:46254

DS_ID:17014 EP_NO: N/A FS_HLM: 21.002 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 Cossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion.LS pipe collars severely damaged--section missing at flapgate. Crossing needs repair. Will need to coordinate with owner.7/8/2013 Same as last inspection.12/4/2013 Same as last inspection.5/28/2014 Same as last inspection.

FIELD_STRUCT_DESC: 2 of 3: 16-inch steel pipe encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates on corrugated metal pipe risers on the waterward slope. Pump structure on the waterward end (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 21.00).

FS Date: 07/16/2015



WS view of corrugated metal pipe risers .

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	20.76	Rating **	U	Issue No.		946 (cont)		
LM End	20.76	Issue Type +	En	Location *		Location *		LS
Supplemental			GPS Latitude/Longitude					
Calegory	Category			Start		End		
Item	DWR UC	P Field Study		39.3706	79 °	39.370679 °		
item				-121.8505	00 °	-121.850500 °		
DWR ID								

Action/Comments

Inspector Comments: FS_ID:46254

DS_ID:17014 EP_NO: N/A FS_HLM: 21.002 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 Cossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion.LS pipe collars severely damaged--section missing at flapgate. Crossing needs repair. Will need to coordinate with owner.7/8/2013 Same as last inspection.12/4/2013 Same as last inspection.5/28/2014 Same as

last inspection.

FIELD_STRUCT_DESC: 2 of 3: 16-inch steel pipe encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates on corrugated metal pipe risers on the waterward slope. Pump structure on the waterward end (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 21.00).

FS Date: 07/16/2015



Riser for pipe 2 of 3.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	21.35	Rating **	U	Issue No.		947
LM End	21.35	Issue Type +	En	Location *		LS
Category Supplemental GPS Latitude/Lor				le/Longitude		
Calegory				Start		End
Item	DWR UCI	P Field Study	,	39.36615	55 °	39.366155 °
item			-121.85988	30°	-121.859880 °	
DWR ID						

Action/Comments

Inspector Comments: FS_ID:46261

DS_ID:16384 EP_NO: N/A FS_HLM: 21.6 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 Pipe is currently undergoing repairs. Not sure what all is planed to be fixed but will update the photos and inspection report with new details when its completed. Needs repair. Internal piping, severe corrosion. Debris present--rusted pipe stockpiled on LS slope. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0234 for no WS gate but sluice gate present.7/8/2013 Pipe appears to have been repaired. Need to talk to inspections and supervisor to find out more deatils on repair.12/4/2013 Same as last inspection.5/28/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal pipe through the levee, 8.2 feet below the crown. Crossing penetrates levee at angle. Slide gate in corrugated metal pipe riser on the waterward slope. Pipe crosses the channel (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 21.60). Corroded section of exisiting pipe, 9-feet 8-inches of an 18-inch CMP section, was replaced under Permit 7231 prior to 1974.

FS Date: 07/16/2015



Overview of crossing looking downstream.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	21.35	Rating **	U	Issue No.		947 (cont)		
LM End	21.35	Issue Type +	En	Location *		LS		
Category	Supplemental				GPS Latitude/Longitude			
Calegory				Start		End		
Itom	DWR UCI	P Field Study		39.36615	55 °	39.366155		
Item			-121.85988	30 °	-121.859880			
DWR ID								

Action/Comments

Inspector Comments: FS_ID:46261

DS_ID:16384 EP_NO: N/A FS_HLM: 21.6 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 Pipe is currently undergoing repairs. Not sure what all is planed to be fixed but will update the photos and inspection report with new details when its completed. Needs repair. Internal piping, severe corrosion. Debris present--rusted pipe stockpiled on LS slope. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0234 for no WS gate but sluice gate present.7/8/2013 Pipe appears to have been repaired. Need to talk to inspections and supervisor to find out more deatils on repair.12/4/2013 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal pipe through the levee, 8.2 feet below the crown. Crossing penetrates levee at angle. Slide gate in corrugated metal pipe riser on the waterward slope. Pipe crosses the channel (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 21.60). Corroded section of exisiting pipe, 9-feet 8-inches of an 18-inch CMP section, was replaced under Permit 7231 prior to 1974. FS Date: 07/16/2015



WS-view of internal pipe with severe corrosion-holes present along pipe wall.

+ Issue Type

Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	21.35	Rating **	U	Issue No.		947 (cont)
LM End	21.35	Issue Type +	En	Location *		LS
Category	Suppleme	GPS La	titud	le/Longitude		
Calegory				Start		End
Item	DWR UC	IP Field Study		39.3661	55 °	39.366155
item			-121.8598	80 °	-121.859880	
DWR ID						

Action/Comments

Inspector Comments: FS_ID:46261

DS_ID:16384 EP_NO: N/A FS_HLM: 21.6 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 Pipe is currently undergoing repairs. Not sure what all is planed to be fixed but will update the photos and inspection report with new details when its completed. Needs repair. Internal piping, severe corrosion. Debris present--rusted pipe stockpiled on LS slope. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0234 for no WS gate but sluice gate present.7/8/2013 Pipe appears to have been repaired. Need to talk to inspections and supervisor to find out more deatils on repair.12/4/2013 Same as last inspection.5/28/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal pipe through the levee, 8.2 feet below the crown. Crossing penetrates levee at angle. Slide gate in corrugated metal pipe riser on the waterward slope. Pipe crosses the channel (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 21.60) Corroded section of exisiting pipe, 9-feet 8-inches of an 18-inch CMP section, was replaced under Permit 7231 prior to 1974. FS Date: 07/16/2015



View of WS daylight. Hole present at pipe daylight.

Location

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	21.86	Rating **	М	Issue No.		948
LM End	21.86	Issue Type +	En	Location *		LS
Category	Suppleme	ental		GPS La	titud	le/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		39.36210)3 °	39.362103 °
item			-121.86782	20°	-121.867820 °	
DWR ID						

Action/Comments

Inspector Comments: FS_ID:46264

DS_ID:16374 EP_NO: N/A FS_HLM: 22.114 Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 6/30/2015 same as last inspection. Unauthorized Encroachment. This crossing is listed multiple times in the USACE Periodic Inspection report as USACE_CESPK_M13E_2011_p_0307, 0315, 0317, 0318 for slope failure on LS hinge. DWR-Flood Maintenance Office records shows that CVFPB has requested AT&T to remove conduit in June 2, 2009 letter. LMA working with CVFPB to resolve.7/8/2013 Same as last inspection.12/4/2013 Same as last inspection.5/28/2014 Same as last inspection.

FIELD_STRUCT_DESC: Illegal encroachment. Underground telephone cable through the levee. Depth unknown. (AT&T) START latitude 39.36210336, longitude -121.8678207 END latitude 39.35458541, longitude -121.8823409. Line extends from Gridley Colusa Highway to the south end of project levee along LS shoulder & levee crown hinge point. Levee sloughs along cable trench after heavy rains.

FS Date: 07/16/2015

Photo 1 of 1: UCIP_FA_2015_5492.jpg



View of utility line located on LS toe.

LM Start	22.13	Rating **	М	Issue No.		4	
LM End	22.13	Issue Type +	En	Location *		LS	
Category	Catagony Earthen Levee			GPS Latitude/Longitude			
Category			Start		End		
Item	Vegetation			39.3599	82 °	39.359982 °	
item				-121.8719	58°	-121.871958 °	
DWR ID	DWR ID DWR_MA0013_02_s _ 2012_4						
Action/Comments							
Landscaping							



View of landscaping along the toe.

Location Issue Type Ma : Maintenance Deficiancy Ob : Design & System Obsolescence LS : Land Side N/A: Not Applicable N: Not Inspected/Rated A : Acceptable WS: Water Side Minimally Acceptable Corrected CR : Crown U : Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	22.15	Rating **	М	Issue No.		949
LM End	22.15	Issue Type +	En	Location *		LS
Supplemental GP:				GPS La	titud	e/Longitude
Category				Start		End
Item	DWR UCI	IP Field Study		39.35982	27 °	39.359827 °
пеш					00°	-121.872300 °
DWR ID						

Action/Comments

Inspector Comments: FS_ID:46267

DS_ID:16391 EP_NO: N/A FS_HLM: 22.4

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/30/2015 Still unable to locate the LS headwall and pipe end. Unable to locate LS headwall. Need photo of LS headwall during next inspection. 7/8/2013 Same as last inspection. Unable to locate LS headwall.12/4/2013 Same as last inspection.5/28/2014 Same as last inspection.

FIELD_STRUCT_DESC: 30-inch corrugated metal pipe through the levee, 15.3 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends. This pipe runs on an angle through the levee, then underground along the landward slope to levee mile 22.39 where it enters a ditch on the landward side (USACE-1960). FS Date: 07/16/2015

LM Start	22.15	Rating **	M	Issue No.	949 (cont)
LM End	22.15	Issue Type +	Fn	Location *	LS



View of WS slope looking from WS headwall to levee crown.

Photo 2 of 3: UCIP_FA_2015_5653.jpg



View of flap gate on WS.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/06/2015 11/06/2015	Bob Duffey

LM Start	22.15	Rating **	М	Issue No.		949 (cont)		
LM End	22.15	Issue Type +	En	Location *		LS		
Category	Suppleme	ental	tal		GPS Latitude/Longitude			
Calegory				Start		End		
ltem DWR UCIP Field Study			39.35982	27 °	39.359827 °			
			-121.87230	00°	-121.872300 °			
DWR ID	OWR ID							
Action/Comments								
Inspector (DS_ID:163 EP_NO: N FS_HLM: Repair Typ Crossing S	391 /A 22.4 be: Non-Ur		7					

Photo 3 of 3 : UCIP_FA_2015_5654.jpg



View of WS slope looking from WS headwall to levee crown.

-						
LM Start	22.16	Rating **	М	Issue No.		8
LM End	22.16	Issue Type +	Ма	Location *		LS
Catagoni Earthen Levee		GPS Latitude/Longitude				
Category			Start		End	
Encroachments ltem			39.3597	07°	39.359707	
item				-121.872555 °		-121.872555
DWR ID	DWR_MA0013_02_s _ 2012_8					
Action/Comments						
Prunings						



View of the debris & prunings.

LM Start	22.58	Rating **	М	Issue No.	7		
LM End	22.60	Issue Type +	Ma	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
				Start		End	
Item Erosion / Bank Caving			39.3564	98 °	39.356303 °		
			-121.879030 °		-121.879417 °		
DWR ID DWR_MA0013_02_s _ 2012_7							
Action/Comments							
Note and monitor erosion site.							



View of the erosion along the canal.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement